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RECORDS OF THE PAST

VOLUME XII JANUARY—FEBRUARY, 1913 PART I

Vol. XII

RECORDS OF THE PAST

Part I

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JANUARY-FEBRUARY, 1913

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FIG. 7. COMMODUS AS HERCULES

Capitoline Museum

RECORDS OF THE PAST

VOL. XII PART I

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CHARACTERISTICS OF ROMAN ART

THE Romans possessed a vigorous and keen intellect, excellent judgment, and good taste. They were practical and acquisitive, not idealistic, fitted for action, not for contemplation and science. They distinguished themselves in oratory, in biographic history, in didactic and satiric poetry. They were preëminent in the practical arts of war, law and politics, in engineering and utilitarian architecture. In sculpture they preferred the practical lines of portraiture and historical reliefs. In the sphere of wall decoration and painting they appreciated the architectural style, and, to a less extent, *genre* and landscape pictures.

Their character influenced the method of artistic execution as well as the choice of motifs and departments. They were alert and keen observers. They took an interest in and noted minute personal peculiarities of form, color, facial expression, and action. They believed that personal appearance was a very close indication of character, and facial expressions were an index of the feelings. This characteristic trait is manifest in numerous authors, especially the satirists, for instance Horace and Juvenal; in the writers on rhetoric, who devote special attention to the appearance and delivery of an orator; in the historians, *e.g.*, Suetonius, who describes the personal appearance of almost every emperor in his *Lives of the Caesars*.

They observed also the color, form, and texture of plants, flowers, and fruits, and, to a less degree, the movements and positions of animals. They noticed the location of a scene and its environment.

FIG. 1. ATHENA'S PIPES AND THE FATE OF MARSYAS
Wall-painting at Pompeii

Their natural realism was no doubt developed by an early custom which dates as far back as 300 B.C.: every family of the Roman aristocracy had a colored and lifelike wax mask (*imago*) made of any deceased member who had been curule aedile, praetor, or consul. The masks constituted a patent of nobility (*ius imaginum*), and they gave the people a certain training in recognizing and demanding a characteristic likeness, as photography has done to a high degree since the days of Daguerre.

Throughout the royal and republican periods the Romans were also greatly influenced in the same direction by the Etruscans, who were very diverse in other respects, but required the same uncompromising realism in art.

The Romans accordingly insisted upon the exact representation especially of the head of an individual, whether beautiful or not, upon the naturalistic reproduction of fruits and flowers, upon a definite background and a specific environment, so far as their knowledge of perspective allowed. They desired the fulness of detail which they habitually perceived in everyday life. They admired elegant technique and a high finish. Roman art made its appeal to the intellect rather than to the æsthetic faculty. Its chief aim was not so much to excite æsthetic emotion and give pleasure as to supply a lifelike presentment of great personalities and a vivid idea of

important historic events. When Roman art is comparatively unimaginative, the principal reason is not lack of creative power, but the fact that Roman common sense disdained to indulge in flights of fancy and rejected Grecian centaurs and gorgons and monstrous giants.

Roman artists developed and made large use of the "continuous method," which presented successive actions or scenes with the same background or in adjoining parts of the same field,—an ancient and primitive way of furnishing a moving picture exhibition (Fig. 1). This style prevailed for 1500 years down to the Renaissance, and was employed by Lorenzo Ghiberti on the "Gate of Paradise," and by Michelangelo on the ceiling of the Sistine Chapel. It is not artistic, but in some respects very well adapted for historical illustrations.

In the reliefs of the Arch of Titus the artists of Rome partially solved the tridimensional problem, or the problem of perspective. In other reliefs

FIG. 2. PORTRAIT OF A GIRL. PERIOD OF HADRIAN
Museo delle Terme

and in painting they were suprisingly successful in mastering linear perspective, when we consider the deficiencies of their optical theories.

In sculpture Roman imperial art first recognized the eye as the organ preëminently expressive of attention, of feeling, and character. It represented the pupil and iris by plastic means, by carving, in place of coloring alone—an improvement that constituted a new epoch in the history of sculpture. In this and other ways it made the faces in statuary more animated and imparted to them a psychological quality, a moral significance unexcelled to the present.

Roman artists represented with sympathetic insight children of different ages and dispositions and social ranks (Fig. 2). They made a great advance not only upon the little brat held by the Hermes of Praxitiles, but also upon the work of Hellenistic sculptors.

Nothing accomplished by the Greeks in their day of highest artistic achievement can be compared with the original Roman decorations of flower and plant life in luxuriant richness, in variety, in a realistic sense of the possibilities of natural objects for the purposes of ornamentation. The Greeks conventionalized plant forms along architectural lines, but Roman realism

FIG. 3. WREATH ON AUGUSTUS' ALTAR OF PEACE

carved them with such fidelity that 14 varieties of fruit may be recognized in one beautiful garland (Fig. 3). The conspicuous plant decoration on walls and furniture, on plate, and in sculpture forms as characteristic a feature of early imperial art as it became afterwards in the art of the Italian Renaissance.

FIG. 4. CLAUDIUS AS JUPITER

Rotunda of the Vatican

In Grecian countries and the East the human form, which had originally been predominant in art, surrendered a great part of the surface to ornament, and finally disappeared. In the West Roman artists at first combined representations of gods and men, but gradually eliminated the divine element, and retained the human form as the chief and dominating idea of art. They were even influential enough to secure its adoption in the service of the Christian religion, which was by precept and tradition hostile to it. In the West, accordingly, this priceless artistic heritage was saved and bequeathed to posterity. As in architecture, so in art, the modern world has admired the idealism, the taste, and the exquisite technique of Athens, but has followed in the footsteps of Rome—the last of the ancient and the first of modern cities.

ROMAN PORTRAIT SCULPTURE

In the course of centuries Grecian art had developed various types of portrait statuary. Roman art adopted a few of them. The subject was at times idealized and represented as a god, for example Jupiter or Hermes, had the attributes of the god, and according to Greek conventionality appeared half, or entirely, nude. He might have some drapery for artistic effect. The head alone would be a portrait, and the body ideal, as in the

famous statue of Claudius as Jupiter (Fig. 4). This combination was a great convenience in the case of statues of emperors, because the imperial heads could be changed with economy and despatch whenever there was a change of emperors. The hair of some portrait busts of women was also made detachable, in order that a coiffure *à la mode* might be supplied as occasion required. It is a remarkable fact that the convention of nude or semi-nude idealized or heroic statues continued down to the times of the American sculptor Greenough, whose Washington is said to indicate with one hand that his bones rest at Mt. Vernon and with the other that his habiliments are in the White House.

In a second style the subject was represented as a mortal in everyday attire or, *e.g.*, as a commander-in-chief. A combination of the two types was possible, and hence we have the bareheaded and barefooted Prima Porta statue of Augustus with the beautiful cuirass (Fig. 5). Full-length statues were regularly life-size or colossal, the latter being reserved almost exclusively for members of the imperial family.

The shape of the busts varied from age to age. In the time of Augustus only the head, neck, and collar bone are represented. By the time of the Flavian emperors the bust includes the shoulders and the pectoral line. During the Hadrianic and Antonine periods it comprises also the upper arms and the lower part of the chest. In the III century A.D. busts reaching to the waist were a common but not an exclusive style.

Greek portraits in general did not possess distinctive individuality, but aimed to realize a type. The purpose of the Greek sculptor was to make a statue artistic and impressive, the object of the Roman was to make it express the character and individuality of the person represented.

The Julio-Claudian art was, however, largely Hellenistic. Many busts and statues were idealized, for example that of the young Augustus. They show more of the Grecian spirit with its high regard for simplicity of line, for beauty of form. They are reserved, dignified, and cold—excellent representatives of the so-called "empire style."

The sculptor of the statue of Augustus from Prima Porta reveals the Italian love of detail, which we find only at times in Greek art, for instance in the well-known mosaic of the "Battle of Issus." The statue is interesting also because it retains many traces of its original polychrome decoration—brown and yellow, blue, pink and red.

In the reliefs of the Altar of Augustan Peace the pupils are in some cases indicated by carving, but this innovation is not employed in statues until the time of Hadrian. The hair is rendered in a simple and natural fashion.

During the Flavian epoch the artists had gained greater mastery of technique and responded with the highest virtuosity to the Roman love of realism. They paid less attention to beauty of line, the modeling became rounder, the planes passed imperceptibly into one another, and a certain illusionistic quality was achieved. The sculptors contrived to seize a momentary yet withal characteristic expression, as a modern photographer aims to do, and, without accumulating superfluous details, they produced wonderfully individualistic and lifelike portraits.

FIG. 5. THE PRIMA PORTA AUGUSTUS

Vatican

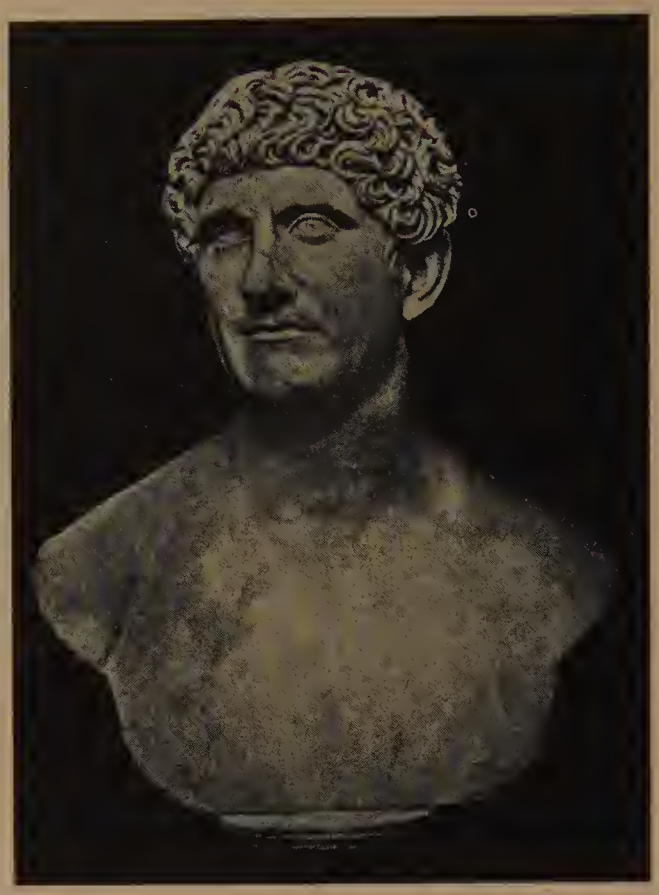

FIG. 6. MARK ANTONY, SO-CALLED

Vatican

The hair of the men was lightly modeled, or, in the case of the "Mark Antony," cut or drilled (Fig. 6). The ladies of the court circles are represented with their hair in front curled in numberless tight ringlets, and supported no doubt on a wire frame. The Trajanic women built up their hair in three stages by means of a stiff metal frame.

In the statuary of the Antonine period the plastic treatment of the eye is further developed. The iris is represented by an incised circle, and within this the pupil is rendered by two small drill holes which reproduce the points of light. In this way the plastic eye can represent the mobility of the natural eye, and the gaze may be directed upwards, downwards, or sideways—not only straight forward as in Greek sculpture. It was this improvement especially that imparted to the Antonine busts a new and extraordinary animation.

In the portraits of Commodus (Fig. 7) and others the skin was highly polished and resembled ivory. This finish was probably a substitute for the color which had been used down to that time. It has been noted for example that in the preceding century (79 A.D.) the numerous statues painted on the walls of Pompeian houses are all represented as colored and not white in imitation of statuary marble. This was another innovation constituting a new epoch, in which modern theory and practice have followed Roman precedent and not the reputed impeccable taste of the Greeks. However, there seems to be no valid reason why pigments delicately applied should desecrate even Parian marble.

FIG. 8. BUST OF CARACALLA

Berlin Museum

FIG. 9. BUST OF PHILIP THE ARABIAN

Vatican

FIG. 10. PORTRAIT OF A MAN. LATE III CENTURY
Strong, Roman Sculpture from Augustus to Constantine

The hair and beard were deeply undercut or drilled. The hair in particular appears to be a mass of deep shadows and high lights. This was a successful attempt to introduce in portraiture the *chiaroscuro*, or coloristic effects, already achieved in other departments of plastic art.

In the busts of Caracalla (Fig. 8) the head is inclined downwards and to the right, the face receives a lively turn to the left, and the glance is slightly raised. The evident aim was to represent a typical tyrant in a moment of passionate anger, and the result is a portrait of marvelous animation and power.

Early in the III century the fashion of clipping the hair and beard quite close was introduced and soon became dominant. The hair was rendered by innumerable fine chisel strokes on a rough surface (Fig. 9). Nevertheless a certain coloristic effect was attained.

When we reach the times of Diocletian and Constantine, great changes have taken place. There is a return to the archaic flatness, or frontality (Fig. 10). Every part of a statue is kept as much as possible in the front plane, the outlines are clear and definite, the drapery is stiff and flat, the face, as in primitive art, is directed rigidly to the front. This

was the beginning of the figure sculpture of the middle ages—with its expressive lines, monumental attitudes, lucid planes, and conspicuous symmetry.

JOHN E. GRANRUD.

University of Minnesota.

NOTE: The author desires to acknowledge his special obligations in the two papers on Roman sculpture to the following authorities:

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BABYLONIAN, ETRUSCAN AND CHINESE DIVINATION[1]

AS A RESULT of a detailed study of Babylonian divination, extending now over a period of more than five years, it may safely be maintained that the endeavor to foresee and, as far as possible, to forestall future events played a very significant and highly important part in the religion of Babylonia and Assyria from the earliest to the latest period. In the course of time the field of divination became so extended as to be almost boundless. Every unusual happening in nature, or in the life of the individual was regarded as an omen, which it was the business of the priests connected with the numerous temples of the south and the north to interpret. Leaving aside certain miscellaneous classes of omens, we may specify three methods of divining the future as the chief ones in use, to wit: (1) Divination through the liver of the sacrificial animal or Hepatoscopy; (2) Divination through phenomena of the

[1] In Vol. VI, Pt. II, RECORDS OF THE PAST, Dr. Albert T. Clay presented in an article on *The Liver in Babylonian Divination*, a review of the work Dr. Jastrow had been doing on this subject. Since that time Dr. Jastrow has continued his researches and at the meeting of the Archæological Institute in Washington, December 28, 1912, he presented a paper summing up the results of his work. This abstract appeared in *Old Penn*, January 25, 1913, but on account of its general interest we are reprinting it with the approval of Dr. Jastrow. For illustrations of the models of livers, and divination texts we would refer to the volume of RECORDS OF THE PAST mentioned above.

heavens or Astrology, including as a supplement the interpretation of storms, thunder, lightning and earthquakes; (3) Divination through signs observed in the young of animals and in newborn infants or "Birth Omens." A significant feature of each of these three methods is the theory underlying in each case. In the case of hepatoscopy, the starting point is the belief —found widespread among people of primitive culture—in the liver as the seat of what the ancients vaguely looked upon as the soul and which included for them the seat of life. The sacrificial animal, when accepted by the deity to which it was offered, was assimilated to the deity, or as we might also express it, the deity in accepting the offering became one with the animal, much as an individual who eats an animal is united with it. The soul of the sacrificial animal thus becomes attuned to the soul or the mind of the deity, and the liver in such a case reflected the mental disposition of the god, as in a mirror, to use a metaphor employed by Plato in describing this very subject of liver divination. Therefore, if one succeeded in reading the liver of the animal sacrificed, one entered, as it were, into the mind of the god who had accepted the animal.

In the case of divination through phenomena in the heavens, more particularly through the observation of moon, sun and the five planets, together with a number of constellations and significant stars, the underlying theory rested on a supposed correspondence between occurrences in the heavens and phenomena on earth. This correspondence was the natural consequence of the view that moon, sun and the five planets (whose motions were observed at an early period) represented deities; and since, according to the current view, whatever happened on earth was due to the gods, the movements observed in the heavens were naturally interpreted as the activity of the gods preparing the events that were to happen on earth.

In the case of birth omens, we must seek for the underlying principle in the mystery attached to the beginning of new life, a feeling that gives rise also to the manifold ceremonies observed among primitive people in connection with a birth. If we add to this principle the very natural thought that anything unusual connected with the mysterious beginning of a new life—due, as everything else, to the gods—portended something of an unusual character, we have the two factors which suffice for our purposes in accounting for the importance attached to all kinds of anomalies observed in young animals and in infants.

A large division of the famous library of Ashurbanipal, so far as recovered consists, as a matter of fact, of several thousands of tablets comprising omens covering the three fields mentioned (apart from miscellaneous omens), together with the interpretations proposed for them. Abundant specimen texts will be found in the second volume of the author's, *Religion Babyloniens und Assyriens*. I need not, therefore, stop to discuss these texts on this occasion, but will pass on to the consideration of the cultural significance of this large field of Babylonian divination.

The evidence may now be considered satisfactory for the thesis that from the Euphrates Valley, as a center, an elaborate system of divination through the liver, spread to Asia Minor and reached Italy and Greece. In Italy it was the Etruscans who introduced Hepatoscopy, and since the

Asiatic religion of the Etruscans is now pretty generally accepted, we may conclude that the Etruscans brought the system with them from an earlier home somewhere in Asia Minor. At all events, the discovery of the famous Bronze Liver of Piacenza, in 1877, forming a complete parallel to a clay model of a liver with cuneiform characters, found near Bagdad and dating from the Hammurabi period clinches the question. Both objects are models devised for instruction in divination through the liver in the priestly schools of Babylonia and Etruria, respectively; and the points of agreement between the two models leave no doubt as to a direct relationship between Babylonian and Etruscan methods of liver divination. Similarly, the finding of models of clay livers with cuneiform inscription on the site of Boghaz-Keui—an important ancient Hittite centre—conclusively shows the early spread of this system of divination among the Hittites and far to the north.

For the spread of astrology through Babylonia and Greece, after the time of Alexander the Great, we now have a chain of evidence recently completed by Professors Bezold and Boll, who have shown that many statements in Greek astrological codices revert directly to a cuneiform original; and since, in both Greece and Italy, we find astrology by the side of liver divination, we are permitted to conclude that in Italy likewise the introduction of astrology is due to Babylonian influences. This is confirmed not only by statements in classical writers, who currently used the term "Chaldean Wisdom" for divination through the starry heavens, but also through striking parallels between what Thulin calls the Etruscan "Blitzlehre" and the storm, thunder and lightning omens found in the collections of Babylon-Assyrian priests. I may be permitted to refer for details to my remarks in volume 2, page 742 seq., and also pages 703 seq. of the *Religion Babyloniens und Assyriens*.

In the work just referred to, volume 2, pages 937–945, I have also summed up and put together evidence which, while not abundant, is yet sufficient to indicate that the system of Babylonian birth omens likewise made its way to Asia Minor and to the Etruscans. Cicero is our authority (*De divinatione*, I, 41–42) for the statement that the Etruscans were particularly skilled in the interpretation of all sorts of malformations (*monstra*) among men and animals. Arnobius and Livy confirm Cicero's point of view, and the explanation as the basis for this system of divination given by Cicero, "as phenomena which point to unusual occurrences about to happen," is itself sufficient proof of the agreement of the Babylonian and Roman viewpoint in regard to malformations and anomalies noted in the young of animals and in infants.

In this brief extract I cannot stop to consider the view of the Babylonian birth omens in accounting for the widespread conception of fabulous beasts like hippocentaurs, and such beings as satyrs, fauns, tritons and mermaids, but must content myself with the suggestion elaborated elsewhere, that such suppositions are merely fanciful elaborations of all sorts of supposed resemblances between one animal and another or between a human being and an animal reinforced by the observation of all kinds of anomalies and malformations.

The evidence for the spread of Babylonian divination to the extreme East is not as definite. We have some striking parallels between Babylonian and Chinese systems of astrology, which are discussed by me in volume 2, pages 745–748, of the work above referred to. Birth omens, we know, likewise played an important part in the Chinese religion, and Professor de Groot has recently expressed the opinion that the divination lore of China impresses him as a foreign importation. If that be so, we would be justified in regarding Babylonia, the oldest center for all three systems, as the ultimate source. Professor Boll, in a paper read before the International Congress of Orientalists at Athens, in April, 1912, definitely proved the western religion of the Chinese Zodiacal system. To be sure, Professor Boll believes the connecting link between China and the West for the spread of the Zodiac is to be sought in the centuries immediately preceding our era, but granting that the connection has been established, more substantial reasons exist for assuming a much earlier relationship between China and the West.

For liver divination in China, Frau v. Bartels, in her recent monograph, *Die Bronze Leber von Piacenza in ihren Beziehungen zu den acht Kwa der Chinesen*, believes to have found direct evidence of the spread of Babylonian hepatoscopy to the distant East. While I cannot follow the learned authoress in all of her ingenious deductions, I am inclined to believe that her main thesis of a direct connection between Babylonia and China in this respect has been made plausible and is at all events worthy of serious consideration on the part of scholars.

Here we must wait for the publication of further material, and it is to be hoped that some Sinologist will take up this theme and make accessible to non-Chinese scholars a portion at least of the vast material dealing with omens of all kinds as practiced for so many centuries among the Chinese.

Morris Jastrow, Jr.

University of Pennsylvania.

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KILNSEA CHURCH IN 1829

THE LOST TOWNS OF THE YORKSHIRE COAST[1]

IN GLACIAL times Scandinavian ice crossed the North Sea and extended a number of miles beyond the border of the Yorkshire coast, leaving a terminal moraine of large size. On the retreat of the ice, this moraine formed the border of Holderness from the rocky prominence of Flamborough Head to the mouth of the Humber, a distance of about 30 miles. Being thus of unconsolidated material, the coast has been subject to rapid erosion by the sea. Only one or two headlands of rock stand out in all that line of coast to mark the original boundary. Throughout the whole distance from Bridlington to Spurn Head the coast is wearing away at the rate of 7 ft. per annum, but at the south end the projection at Spurn Head has been lengthened and enlarged by the detritus washed along the shore, while large additions have been made by deposit from the River Humber some distance above its mouth. As a consequence, sad havoc has been made with many flourishing villages and cities which were built near the coast. There are records proving the almost total disappearance of at least 8 villages from the eastern shore, some of them of considerable size and importance. One, Ravensburg (or Ravenser), was at one time "one of the most wealthy and flourishing ports of the kingdom. It returned two members of Parliament, assisted in equipping the navy, had an annual fair of 30 days, two markets a week, is mentioned twice by Shakespeare (*King Henry VI*, pt. iii, act iv, scene 7; and *Richard II*, act ii, scene 1) and considered itself honored by the embarkation of Baliol with his army for the invasion of Scotland in 1332; by the landing of Bolingbroke, afterwards Henry IV, in 1399; and by the landing of Edward IV in 1471,

[1] *The Lost Towns of the Yorkshire Coast, and other Chapters bearing upon the Geography of the District.* By Thomas Sheppard, F.G.S., F.R.G.S., F.S.A. (Scot). Pp. xviii, 329. Fully illustrated. 7s. 6d. net. London: A. Brown and Sons. 1912.

not long after which it was entirely swept away." Today, we cannot even be certain where the place was. It is doubtless near this spot, on the extreme end of the promontory that the Danes landed in 867, and planted their standard "the Raven."

Ravenser-odd was a Danish settlement built upon an island near Ravenser, which had a representative in Edward III's naval Parliament in 1344. In 1360 it was totally annihilated by the floods of the Humber and the inundations of the great sea. A short time before, however, the bodies in the chapel yard, which were being washed away, were removed and buried in the churchyard at Easington. Notwithstanding this "in the Hedon inquisition of January, 1401, the chapel of Ravenserodde, with the town itself, was declared to be worth, in spirituality, more than £30 per annum" (p. 96).

To escape destruction Aldborough was moved 2 or 3 miles inland, the original site of the town having been washed away. The stones of the front part of the church containing some Saxon relics were removed and built into the present structure for preservation. One of these relics is a circular sun dial built into the inside wall up side down. At Withernsea, groynes were built so as partially to stay the wash in recent times, but early in the XV century the churchyard was washed away and the present structure erected some distance from the shore. The old church is thought to have stood "at a point now covered by the sea, and about a mile due east from the corner of the inn now known as the 'Commercial' " (p. 137).

At Roos Carrs some workmen in clearing for sewers or drains came across what is supposed to be the earliest evidence of Scandinavian occupancy. They were figures carved from wood with quartz pebbles for eyes. The locality in which these were found is near Withernsea, marking the bed of a small stream which had furnished a harbor for small fishing boats. At Hornsea Burton, the cliff is wearing away at a rate of 7 to 13 ft. per year. In 1609 it was reported that in the previous 80 years 39 houses and 39 closes had been washed away, thus greatly reducing the rents of the place. At Skipsea large pieces of amber used to be found as the cliff was washed away. Near here, also, a peat deposit was exposed in what was formerly the bed of a glacial lake, while near by were found remains of pile driving and many important relics of the stone and bronze ages.

Westward towards the Humber instead of a loss of land there were, as we have said, extensive additions. While 774 acres were lost on the seaward side of Holderness, between 1848 and 1893, 2178 had been added or reclaimed upon the Humber side. "The once flourishing seaport of Hedon, which sent 3 members to Parliament, and still possesses valuable corporation plate, including the oldest mace in the country, is now a quiet country town of a thousand inhabitants. It is today some 2 miles distant from the Humber, though the old docks and waterways can still be traced in grass fields. Its official seal—a sailing ship manned—seems to be all there is bearing upon its one-time connection with the sea. A narrow meandering creek at high tide now allows small craft to approach a town which once supplied ships and men to the king's navy" (pp. 52, 54).

MAP
SHOWING THE
Lost Towns of East Yorkshire,
BY
T. SHEPPARD, F.G.S.
NORTH SEA.
FLAMBOROUGH
FLAMBOROUGH HEAD.
BRIDLINGTON
WILSTHORPE
AUBURN
HARTBURN
BARMSTON
DRIFFIELD
ULROME
HYDE
WITHOW
CLETON
SKIPSEA
ATWICK
NORTHORPE
HORNSEA
HORNSEA BURTON
HORNSEA BECK
SOUTHORPE
ROWLSTON
MAPPLETON
GREAT COLDEN
COLDEN PARVA
OLD ALDBOROUGH
ALDBOROUGH
RINGBOROUGH
MONKWELL
GARTON
GRIMSTON GARTH
HILSTON
MONKWIKE
TUNSTALL
SAND-LE-MERE
WAXHOLME
OWTHORNE
SISTERKIRKE
NEWSHAM
OLD WITHERNSEA
WITHERNSEA
HOLDERNESS
BEVERLEY
HULL
HEDON
PAULL
KEYINGHAM
OTTRINGHAM
HOLLYM
HOLMPTON
PATRINGTON
OUT NEWTON
WELWICK
THARLESTHORP
FRISMERSK
PENISTHORPE
SKEFFLING
EASINGTON
DIMLINGTON
TURMARR
NORTHORP
EAST SOMERTE
ORWITHFLEET
SUNTHORP
BURSTALL PRIORY
HOTON
KILNSEA
OLD KILNSEA
RIVER HUMBER
LINCOLNSHIRE.
Site of ANGELL'S LIGHT
RAVENSPURN
SPURN HEAD
RAVENSER ODD
N.E.R.
RIVER HULL
W
E
LOST TOWNS.
SITE OF MERES.
ROMAN COAST-LINE.
RAILWAYS.
PRESENT TOWNS & VILLAGES.
AREA FLOODED IN 1906.

THE OLD KILNSEA CROSS, FROM CHILD'S ORIGINAL DRAWING, 1818
Courtesy of Yorkshire Archæological Society

Hull itself has an interesting history partially recorded in the topographic changes which have taken place within its walls and its immediate vicinity. In the earliest times what is now the River Hull had two mouths, the "Old Town" itself being built upon the delta between them. During the civil war in 1642, by a series of sluice-gates connecting the Humber and the Hull, the entire surrounding country was flooded. Originally before the days of King Edward I the site of the city was occupied by a small villa called Wike. In mediæval times it became a moated stronghold. The present docks of the city are built upon the site of the old wall and moat.

Spurn Point is the one high point on the coast which has grown instead of being wasted away as other places exposed to the washing of the sea have

been. This is due to the meeting at that point of the waters of the Humber with those of the sea. As early as the VII century we have references to this promontory. "Wilbrord, the great apostle of the Frisians, was born in Yorkshire in 657 or 658. His father, whose name was Wilgils, late in life betook himself 'to the promontories which are encircled by the ocean sea, and Humber River,' where he remained to the end of his days 'in a little oratory dedicated to the name of St. Andrew the apostle of Christ.' His fame became noised abroad, and he was reported to have wrought miracles. Many resorted to his cell and the king gave him 'as a perpetual gift' certain small patches of land adjoining the promontory that a church might be built there. On his death his bones were laid in his 'sea-side cell'" (p. 72).

Not only does the topography of Holderness speak in eloquent terms of its early history but we have important historical data in the names which are attached to the region. The shire of York was once a part of Northumbria. The ending "shire" is derived from the Anglo-Saxon *scir* indicating that it was originally a share or division which made up one of the early Saxon kingdoms and indicating also its Saxon origin. "Yorkshire is unique among the English counties in being divided into Ridings, namely, the East, North and West Ridings." "The word riding is a corruption of 'thriding' the old English form of thirding and is now used exclusively in this connection. The loss of the 'th' is due to the mis-division of the compound word, as 'North-thriding,' 'East-thriding'" (p. 12).

Thus does Professor Shepard give great interest to a subject which at first sight would promise to be of little historical value. All who are interested in the book of nature will be greatly impressed with the object lesson which Holderness presents in illustration of the fact that her work is never done but is always in process of doing, and that history and natural history are inseparably joined.

FLORENCE B. WRIGHT.

Oberlin, Ohio.

THE PRE-VIKING IMAGES FROM ROOS CARRS

LA PIERRE LEVÉE, PORTIERS, FRANCE

THE "PIERRE LEVEE," POITIERS, FRANCE

AMERICANS who visit Poitiers to inspect the cathedral and other interesting churches and remains of antiquity should not omit the oldest of all of them—the dolmen known as the "Pierre Levée." There is no difficulty in reaching it as tramcars go from the Hotel de Ville to a point very near it in about 20 minutes. They pass the front of the prison and the dolmen is at the back of it in a garden at the corner of two roads.

There are the remains of 7 stones forming originally the walls of a chamber, probably sepulchral, 10 ft. wide from northwest to southeast and 7 or 8 ft. from northeast to southwest. The roof was a single stone which is now about 15 ft. in extreme length and breadth, but a further length of 4 ft., apparently broken off, lies on the ground at its northeast end. Two of the supports at the southwest end are from 5 to 6 ft. high but those at the northeast have fallen and let that end of the capstone down to the ground so that without excavation it is not possible to say whether another chamber exists there or not. The capstone is nearly 3 ft. thick and on the top of it, near the north corner, are a rather remarkable boss and ridge.

A. L. LEWIS.

Wallington, Surrey, England.

REMAINS OF THE OLD NORTH AND LATE WEST TEMPLES. ANU-ADAD TEMPLE

AŠŠUR AND NINEVEH[1]

AŠŠUR

OF ALL the little explanatory verses on the Old Testament there are probably but few which are of greater interest than that referring to the great cities of Assyria. It is that well-known verse 11 of the tenth chapter of Genesis, which, in the Revised Version, tells us that, "out of that land (Shinar or Babylonia) he (Nimrod who is best identified with the Babylonia god Merodach) went forth into Assyria, and builded Nineveh, and Rehoboth-Ir, and Calah, and Resen between Nineveh and Calah (the same is the great city)." Whether it was Asshur or Nimrod who went forth from Babylonia or not is a matter of but minor importance, as it is the cities which were founded, and not the person who founded them with which we have to deal.

A very important testimony to the great size of Nineveh is given in the Book of Jonah, where it is spoken of, in verse 2 of the third chapter, as "that great city," and further, in the third verse of the same chapter, as "an exceeding great city, of 3 days' journey," the distance referred to being commonly regarded as indicating its extent. Naturally, there is some difficulty in estimating this from such a vague statement, for, admitting that the words are correctly applied, the distance traversed must necessarily depend on the speed of the traveler. Perhaps a preaching-journey, such as that upon which the Prophet Jonah was engaged, was slower than an ordinary one, but taking as a rough estimate 10 miles a day, this would make about 30 miles as its greatest extent. Between Nineveh and Calah, however, there is nothing like this distance, so that another explanation will have to be found.

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[1] Read at a meeting of the Victoria Institute, March 7, 1910, and reprinted from their Journal of Transactions.

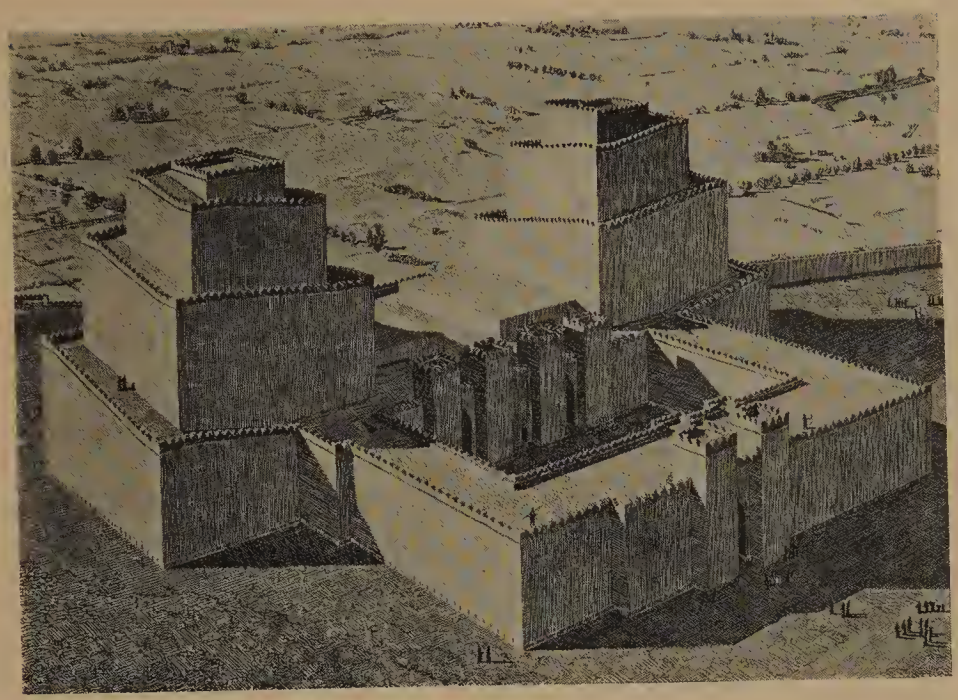
But though I shall refer, later on, to the size of Nineveh, the primary object of this paper is to describe the recent discoveries there and in the old capital, Aššur—a site which, strangely enough, seems not to be referred to in the tenth chapter of Genesis at all. Aššur, however, was a city of considerable extent, and, as the older capital, and the center of an important branch of Assyrian religious life, a place of considerable importance. Situated between 40 and 50 miles south of Kouyunjik, the ancient Nineveh, Aššur, which is now called Qal'a Shergāt, was first excavated by the late Sir Henry Layard, in 1852, when some fragments of the great historical cylinder of Tiglath-pileser I, with a few other objects, were found. Excavations were continued on the site in 1853, when other copies of the cylinder were discovered. One of the largest objects recovered at that time was the black basalt headless statue of Shalmaneser II, the king of the Black Obelisk, who came into contact with the Syrian League and Ahab, and received tribute from Jehu, son of Omri.

The date of the foundation of the city is naturally unknown to us, but it was in existence as early as 2000 years B.C., as Hammurabi testifies. He speaks of having "restored to the city, Aššur, its good genius," suggesting that the place had passed through a period of depression—in any case, whatever the misfortune was, Hammurabi would seem to claim to have remedied it.

The German excavations at Aššur, the city to which the eyes of English explorers had for long been turned, have added much to our knowledge of Assyrian history. About the time of the Babylonian king Abēšu, or Ebišu, ruled viceroy Ušpia, who seems to have been the founder of the temple of Aššur in the city of that name.

This ruler was succeeded by Kikia, after whom came Ilu-šuma and his son Êrišum, both of whom were known, from bricks brought from the site by Sir Henry Layard, to have been viceroys of Aššur (*iššak Aššur*). Êrišum built anew the temple of Aššur, which was called Ê-hursag-kurkura "the house of the mountain of the lands," but in the course of 179 years it fell into ruin, and was rebuilt by Šamši-Adad, viceroy of Aššur. Ikûnum, who reigned after Êrišum, rebuilt the temple of the goddess Ereš-ki-gal, the Queen of Hades so often referred to in the account of the Descent of the goddess Ištar to that region. At this early date the records are mainly architectural, but it is to be expected that something more of the history of the country may come to light, though as the viceroys of Assyria seem to have been under the suzerainty of Babylonia, their natural warlike nature would be somewhat hidden. It seems to be only when they became kings in their own right that those long and often tedious but exceedingly valuable historical records, giving details of their conquests, and recounting their relations with the countries around—relations generally the result of those conquests—meet our wondering gaze. The Assyrians seem not to have engaged in military exploits for the mere lust of conquest, but because they were ambitious, and wished to hand down their names to posterity as more renowned than any ruler who had preceded them.

According to Mr. Hormuzd Rassam's account, the site of Qal'a Shergāt, as Aššur is now called, is unlike that of the ruin-mounds of other Assyr-



THE TEMPLE OF AŠŠUR-RÊS-ÎSÎ AT AŠŠUR. RESTORATION BY ANDRAE

ian cities. Instead of standing out boldly and distinctly from the natural and artificial hills around, it is comparatively flat, the greater portion being simply a gradual slope upwards from south to north. When approaching it from the south or southeast, therefore, nothing can be seen except the ruins of the great temple-tower, Ê-hursag-kurkura, the lower boundary being simply a continuation of the natural hills at those points. Viewed from the north and northwest, however, the platform upon which the city is built has the appearance of a structure towering almost perpendicularly to a height of about 100 ft. above the level of the plain.

It is at the northeast corner of the city-enclosure that the temple of the god Aššur, founded, apparently, by Ušpia, lies; and immediately adjoining it is the palace of Shalmaneser I (about 1330 B.C.) and another small temple. The great *ziqqurat* or temple-tower lies a little farther to the W.S.W. Still farther to the same point is the palace of Aššur-nasir-âpli (885 B.C.), and W.S.W. of that again, lies the most noteworthy ruin of the place, namely, the temple of Anu and Adad—the well-known god of the heavens and his son, Hadad or Rimmon, the god of the atmosphere. The westernmost erection is the terrace of the new palace of Tukulti-En-usāti (Tukulti-Ninip) I (1300 B.C.), which seems to have been a building of considerable extent. Among other erections may be mentioned the temple of Nebo, built—or more probably rebuilt— by Sin-šarru-iškun, the Saracos of the Greeks, under whom the fall of Nineveh and the domination of Assyria took place. This foundation contained a treasure-house of the goddess Tašmêtu, the spouse of Nebo. Another important building on the site was a temple to the goddess Ištar, who seems to have borne the name of Ninaittu. Numerous private houses and graves, some of them excellently constructed vaults, with terra cotta coffins, have been found. Of the smaller antiquities some examples have been published, but bas-reliefs

similar to those found in such numbers at Nineveh and Khorsabad, are rare or non-existent. Concerning certain royal figures and stele I shall have something to say later on.

From the photographs which have been published it is satisfactory to notice that Mr. Rassam's description of the ruins is correct—the great *ziqqurat* or temple-tower is the only thing appearing prominently above the surface of the ground. Notwithstanding the interest of this structure I am compelled to leave it for the present, as I have not sufficient material for a good description of it. Later on, when a detailed account with restorations, similar to that treating of the temple dedicated to Anu and Adad, which has been so well described by Dr. Andrae, the chief explorer of the site, has appeared, I hope to return to the subject.

Though it is somewhat surprising, we probably known more about the comparatively worse-preserved temple of Anu and Hadad than about the great *ziqqurat* which was, in the days of its supremacy, such a prominent feature of the city. But the temple to these two gods is so interesting that a special monograph concerning it has been written by Dr. Andrae, the Director of the excavations, and it is on this account that the description which I am about to give of it is possible.

The lowest structures of the Anu-Adad temple are of Aššur-rêš-îši, who was the ancient builder, if not the founder, of this double shrine. This ruler, who was the father of the well-known Tiglath-pileser I, records his name on the bricks which his builders used, as follows:

(1) *Aššur-rês-îši* (2) *šangu Aššur* (3) *âpil Mutakkil-Nasku* (4) *šangu Aššur* (5) *âpil Aššur-dan* (6) *šangu Aššur-ma, banu bît Addi* (8) *u Anim.*

"Aššur-rêš-îši, priest of Aššur, son of Mutakkil-Nusku, priest of Aššur, son of Aššur-dan, priest of Aššu, likewise, builder of the house of Adad and Anu."

This inscription is not produced by means of a brick stamp, but is written by hand, probably with a rectangular stick of wood, a corner of which, pressed into the clay, forms the wedges—no matter what their shape—with which we are so familiar. The words are all usual ones, and the text is composed with a due regard to the rules of Assyrian grammar, as far as their ideographic system allowed. It is noteworthy that, in this and other inscriptions found on the site, the name of Adad precedes that of his father Anu—whether because he was the more popular god, or for some other reason, is uncertain.

Like all the structures of this class in Babylonia and Assyria, the corners of the buildings are directed, roughly, towards the cardinal points. Its rear looked therefore towards the northern city-wall, which sloped from northeast to southwest, and its front towards the southwest, facing the central portion of the city. The temple proper seems to have consisted of a rectangular terrace with its entrance on the site referred to, flanked by two towers, by which one gained access to a central court-yard, and thence into the rooms where the religious ceremonies were performed, the priests' private rooms, and those wherein the holy vessels and utensils were kept. As it was a double temple, the architects arranged the rooms in each portion symmetrically, and each god had the same number of rooms in the fane

dedicated to him—4 small rooms arranged round a central chamber which was apparently the sanctuary. The broad recess at the northwestern end of each hall suggests that at that end lay the holy place, where the image of the god of the fane stood, and the priests performed their ceremonies. On each side of these rooms, at the angles of the northwestern front, were two massive temple towers, which Dr. Andrae supposes to have been in 4 stages, access being gained to them from the terrace, and also, probably, from a corridor which ran between the chambers (dividing the temples from each other), or from the chambers themselves. Though no sanctuaries are shown at the tops of these temple-towers, it is not improbable that there was one in each case similar to that of the temple of Belus at Babylon. It is to be noted, however, that a sanctuary at the top of every temple-tower was not an absolute necessity, as the ceremonies may have been performed in the open air. Dr. Andrae's restoration of the earlier structure, which I now describe, does not represent the outer walls as being decorated with those deeply-recessed panels which are such a characteristic of structures of this kind, both in Assyria and in Babylonia. As will be seen later, however, this decoration was employed in the later structure.

It is needless to say that brick structures such as these were constantly needing repairs, and the successors of the builders were accustomed to regard it as their duty to carry them out. Tiglath-pileser I, the son and successor of Aššur-rêš-îši, fulfilled this task with great thoroughness, and records it in detail on his great cylinders, now preserved in the British Museum, and published in the *Cuneiform Inscriptions of Western Asia*, Vol. I, Pl. 15, l. 60 ff. This king states that the temple tower was built or founded by Šamši-Adad, viceroy of Aššur, about 1821 B.C., It had been demolished by Aššur-dan, who ruled about 1200 B.C., but this king had not been able to rebuild it. For some reason, which does not appear, Tiglath-pileser does not refer to the work of his father Aššur-rêš-îši perhaps he only began the work towards the end of his reign, and Tiglath-pileser may have had the superintendence of it for he expressly states that it was at the beginning of his reign that the gods ordered their dwellings to be rebuilt. He then made the bricks, cleared the site, reached the core, and laid the foundation upon the ancient nucleus—brickwork first, and then blocks of stone. He built it, he says, from its foundation to its battlements, and made it larger then before, and he rebuilt also the two great temple-towers, which were adapted to the dignity of the two gods' great divinity. Here it may be noted that translations similar to this were made before the discovery of the site, so that, if there were any doubt as to Assyriologists having found out the way to translate the wedge-written inscriptions, the temple of Anu and Adad would, in itself, suffice to prove beyond a doubt that the renderings were correct. The interior of the two-fold temple, he says, he made bright like the center of the heavens, decorating its wall like the glory of the rising of the stars. Having founded the holy place, the shrine of their great divinity within it, he caused Anu and Adad, the great gods, to enter there, set them in their supreme seat, and thus gladdened their hearts.

PAVEMENT BEFORE THE LATER ASSYRIAN GATE AT THE EAST CORNER OF THE ANU-ADAD TEMPLE

After a description of the *Bît hamri*, which seems to have been the treasure-house attached to the temple, or to one of the two shrines (that of Adad) which it contained, Tiglath-pileser calls upon the gods whom he had thus honored to bless him, and hear his supplication, granting fertility and plenty to his land, and in war and battle bringing him safely back, etc. He states that he had performed the usual ceremonies, anointing the memorial-slabs of Šamši-Adad, his father (ancestor), with oil, sacrificing a victim, and then restoring them to their place. He asks that the future prince, when those temple-towers grew old and decayed, might treat his own inscription in the same way, and calls down a deadly curse, and all the displeasure of his gods, on any who should destroy his inscriptions. Tiglath-pileser's own inscriptions, impressed on the bricks of the temple, read as follows:

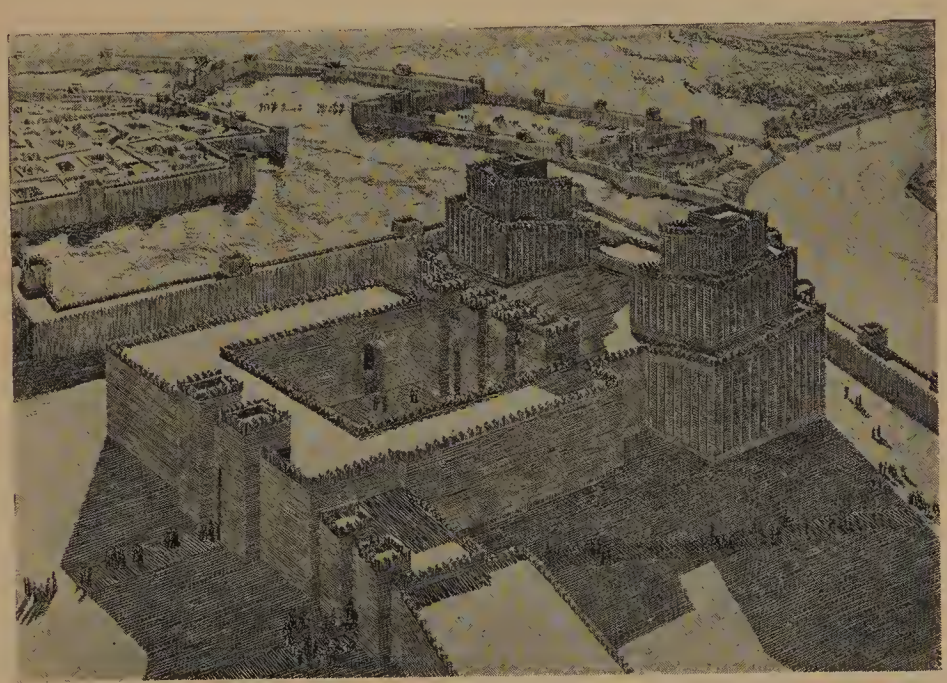
Tukulti-âpil-êšarra	Tiglath-pileser,
šangu Aššur mâr Aššur-rêš-îšî	priest of Aššur, son of Aššur-rêš-îšî,
šangu Aššur bît Adad bêli-šu	priest of Aššur, the house of Adad, his lord,
êpuš-ma iksir	he has (re)built and paved.

Time passed, and though the temple was in all probability repaired as occasion required by the successors of Tiglath-pileser I, it had reached such a state of decay by the time of Shalmaneser II (859 B.C.) that that king thought himself justified in rebuilding it. It will be remembered that Shalmaneser II was the king who came into conflict with the Syrian league, to which Ahab of Israel and Ben-Hadad of Damascus belonged. Inscriptions on what are called *ziqati*, found on the site, record the work which he executed on the temple as follows:

"Shalmaneser, king of Assyria, son of Aššur-nasir-âpli, king of Assyria."

[Here follow references to his conquests in Armenia, the West, Babylon, and the sacrifices which he offered in Borsippa, the renowned suburb-city of Babylon, of which he speaks also elsewhere. As the cradle of their religion, Babylonia, and especially the capital and the cities around, must have been a land of veritable romance to the pious Assyrian.]

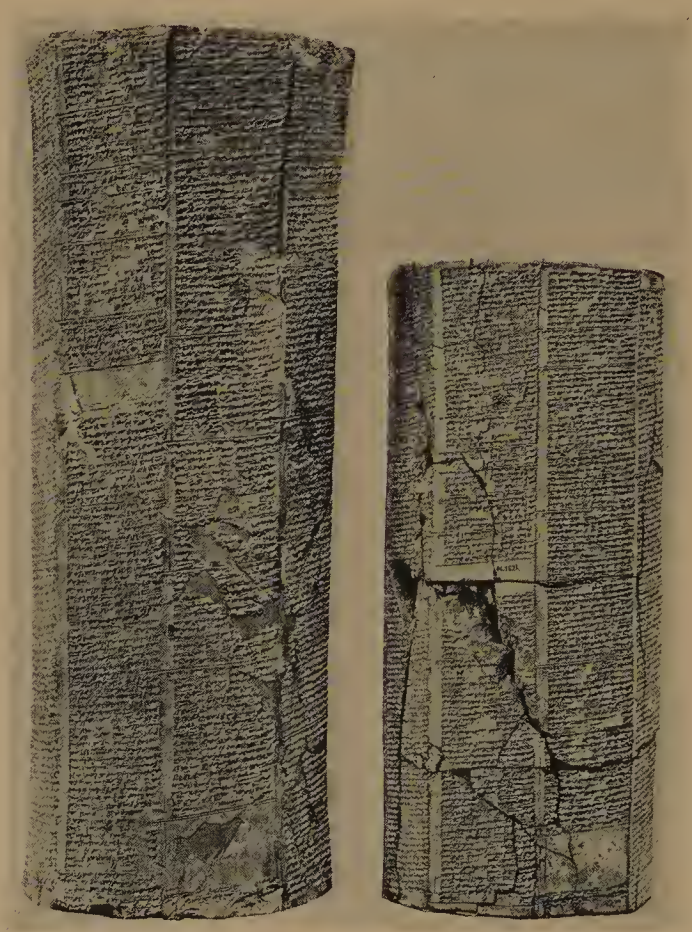
"In those days the temple of Anu and Adad,
my lords, which earlier Tukulti-âpil-êšarra (Tiglath-pileser),
son of Aššur-rêš-îšî, son of Mutakkil-Nusku (had rebuilt), had fallen into ruin,
to its whole extent I built it anew.
I brought beams of cedar, (and) set them for (its) roof.
Let the future prince renew its ruin,
restore my written name to its place—
Aššur, Anu, Adad, will hear his prayer.
Let him restore my *ziqati* to its place.
Month of Mahur-ilanî, day 5th, first year of my reign (or possibly of my 20 expeditions).



SHALMANESER II'S TEMPLE AT AŠŠUR. RESTORATION BY ANDRAE

From this we gather, that the restoration of the temple of Anu and Adad by Shalmaneser II was no mere work of simple repair, but a rebuilding of the structure, as, indeed, Andrae's plans indicate. The halls and rooms were to all appearance decorated with all the skill of the Assyrian artisans, and cedar, probably from Lebanon or Amanus, was used for the support of the flat roof of the outer structure. Contrary to what we should expect, the temple, when rebuilt, was smaller than the structure erected by Aššur-rêš-îšî, the father of Tiglath-pileser I. The design, it is true, was more symmetrical but as the new structure was wanting in breadth, it must also have been wanting in boldness. The entrance seems to have been to the left of the center of the terraced front elevation, and the central court-

yard was smaller. It was from this last that access was gained to the rooms used for the ceremonies and for the furniture of the temple. Passing through extensive vestibules, the visitor reached the main halls, which instead of recesses regarded as holy places (which were probably separated from the main halls by curtains), were provided with side-rooms on the right and left of the halls to which they belonged respectively. The two *siqqurrāti*, to which access was probably obtained from the terrace above the chambers, were towers in stages similar to those of the earlier structure, but their outer walls were panelled, not plain. A fine view of the river to the northwest must have been obtained from these heights. The absence



THE TIGLATH PILESER PRISMS IN THE BRITISH MUSEUM

of formally straight lines in Dr. Andrae's restoration is not altogether unpleasing, and is, in fact, in accordance with the picture on the grant of land obtained for the proprietors of the *Daily Telegraph* by the late George Smith, and now in the British Museum. The carving on the stone in question is very rough, and the details are not, therefore, very marked, but it may be noted, that the shrine on the top is very distinctly shown, suggesting that similar erections may have existed on the similar buildings in the city of Aššur. After this, the restorations of Assyro-Babylonian temple-towers in Perrot and Chipiez's *History of Art in Chaldea* strike one as being rather formal.

VIEW OF THE ANU-ADAD TEMPLES FROM THE NORTHWEST

Among those who repaired and restored the structure at a late date, Dr. Andrae mentions King Sargon of Assyria, the well-known ruler who captured Samaria. In Shalmaneser II's courtyard (which has, by the way, a very good well in the southwest corner), an excellent pavement of tiles almost exclusively of Sargon was discovered. The inscriptions thereon were in two languages, Assyrian and dialectic Sumerian, and read as follows:

"For Aššur, the father of the gods, his lord,
Sargon, king of the world, king of Assyria,
magnate of Babylon, king of Sumer and Akkad,
has caused this pavement to be laid, and with bricks of the sacred oven,
the pathway of the court of E-hursag-gal-kurkura
he has made bright like the day."

This "pathway" finds a parallel in the festival-street at Babylon, and was probably for the processions of the gods when their statues were carried round to visit other shrines and temples, both of the city of Aššur and the neighboring towns.

One of the pictures published shows the entrance to the room designated *F*, looking from the courtyard. Before it is the pavement of Sargon, and below that, the older pavement. The earthen vessel near the center is said to be a collecting vase, possibly for offerings.

The desolation which this once flourishing town and temple present may be gathered from the general view from the east, showing the remains of the old north and the late west temple-towers. On the left are the lowest foundation-courses of the courtyard-wall, and in the middle are the remains of walls of some of the rooms. The remains of the late west temple-tower are to be seen behind.

Naturally there is much to say concerning these interesting and extensive ruins, which testify, among many others, to the great and active life of the ancient cities of Assyria, at one time the scourge of the then-known world. The walls and their gates, the numerous other temples, especially

those of Aššur, Nebo and Ereš-ki-gal, the Queen of Hades; the palaces; the platforms; and the "hunting-box" of Sennacherib, which lay outside the walls to the northwest, all present points of interest. Descriptions of these, however, will be best undertaken when satisfactory monographs dealing with them are published, like that of Andrae upon the Temple of Anu and Adad, which has furnished material for this portion of the present paper.

Though the objects of art do not by any means equal in number to those from Nineveh, Calah and Khorsabad, there are still a few which are worthy of notice. One is a 16-sided column of basalt with a strange-looking capital, supposed to be of the time of Tiglath-pileser I. Another good specimens of Assyrian art consists of fragments of bronze on which chased figures in relief may be seen, reminding one of those magnificent brazen gates which Mr. Rassam was so fortunate as to discover at Balawat. This shows figures in procession, seemingly going to meet the Assyrian king, and introducing a smaller figure, apparently a child. There are several scenes on the Balawat gates which can be compared with this, and in the light of Shalmaneser's historical inscriptions, it is seen that the little personage is a princess who is represented, and that she is being surrendered by a conquered prince or chief to the Assyrian king to become one of his wives. The proportions seem not to be so well kept as in the case of the Balawat Gates, but the work in general is good.

NINEVEH

Aššur is regarded as having been the first capital of Assyria, and Nineveh the second; but Dr. Rogers lays claim to the honor of chief city of the kingdom for two others in addition—Calah and Khorsabad the order being Aššur, Calah, Nineveh, Khorsabad (built by Sargon on the site of Maganubba), and then Nineveh again. If so, this is a case of kings proposing and God disposing, for notwithstanding all that Sargon did for Dûr-Sarru-ukîn, now Khorsabad, its importance declined after his death, and Sennacherib, his son, showered his favors on Nineveh, which remained the capital of the land until the downfall of the Assyrian monarchy in 606 B.C.

And it is apparently in consequence of what Sennacherib did for the city that its glory revived. Two German scholars, Messrs. Meissner and Rost, have edited and translated very successfully the inscriptions in which that king records his work there, so that we have had for a considerable time rather full details of his architectural, horticultural and defensive achievements.

Lately, however, fresh attention has been attracted to them, for the British Museum has been fortunate enough to acquire another text—a prism similar to the monument known as the Taylor Cylinder, inscribed for the same monarch. This text has, on its 8 faces, no less than 740 lines of writing dealing with his campaigns and his architectural works. There is the usual honorific introduction, and this is followed by his first campaign, which was against Merodach-bal-adan; his second, directed against the Kassites and the Yašubi-galleans; his third, which passed in the land of Hatti, the territory of the Hittites, and was undertaken to chastise Hezekiah and punish the Ekronites; his fourth, which was against the small Chaldean

kingdom of Bît-Yakîn; and his fifth, directed against certain states occupying the mountain-fastnesses of Mesopotamia. After these well-known narratives, however, we get details of two little-known military expeditions, in which Sennacherib did not personally take part, but which were led by his generals. The first of the two was against Kirua, ruler of the land of Que (Cilicia), whom he calls "city-chief" of Illubru, and describes as one of his officials. This man not being, as his name implies, an Assyrian, naturally thought to make himself independent of Assyrian rule, and to this end got the city of Hilakku (Cilicia) to revolt, and the inhabitants of the cities Ingirâ and Tarsus to rally to his side. These allies occupied and blocked the Cilician pass, hoping to be able to arrest the Assyrian troops in their advance. In this, however, they were unsuccessful, the forces sent against them being armed with all the thoroughness for which the Assyrians were renowned, and even more thoroughly than on former occasions. The Cilicians were first defeated "among the difficult mountains," and the cities of Ingirâ and Tarsus were captured and spoiled. Next came the siege of Illubru, carried on with the help of all kinds of warlike engines, and its fall followed in due course. Kirua, the governor, was captured, and much spoil taken. Having been brought to Nineveh, he met the fate which awaited him, that of flaying—whether alive or dead the record does not say. At the re-occupation of Illubru, which followed, Aššur's emblem was set up, and, facing it, the memorial slab which had been prepared for the purpose.

According to Polyhistor, Sennacherib proceeded against Cilicia in person, a statement which, if he be referring to the same campaign, must be regarded as incorrect. This historian also says that he fought with them a pitched battle, in which, though he suffered great loss, he was successful in defeating them, and erected on the spot a monument of his victory, consisting of a statue of himself, and a record of prowess "in Chaldean characters." Sennacherib does not mention any statue, but there may well have been a bas-relief above the inscription to which he refers. Confirmation of Polyhistor's statement that Sennacherib rebuilt the city of Tarsus after the likeness of Babylon, and changed its name to Tharsis, may possibly be confirmed by records of a later date—if such ever come to light. Though it is not much, this new chapter in the history of the Apostle Paul's native city is interesting. It had already been taken by the Assyrian king Shalmaneser II, about 850 B.C., when Katî, the then ruler, was deposed and his brother Kirrî placed on the throne in his stead.

The other campaign referred to was against Tilgarimmu, a city on the borders of Tubal, which Assyriologists have identified with the biblical Togarmah—a comparison, however, which is not altogether satisfactory; though it may, by chance, turn out to be correct. This place was ruled by a king named Hidî, who had "consolidated" (such seems to be the meaning of the verbal form *irkusu*) "his kingdom," apparently meaning that he wished to be considered as independent of Assyria. Again the superior armament, and, it may be supposed, the organization of the Assyrians, prevailed; and after the usual siege, the city was taken and destroyed, and the gods of the people carried into captivity. At the end Sennacherib men-

tions the amount of military supplies which he captured and distributed among his forces. This was apparently not an important expedition, but it added to the glory of his reign, and is on that account recorded.

But the longest section of the text is that detailing the work which Sennacherib did at Nineveh, his capital, to which he has devoted no less than 345 lines of writing. He describes the city as the place beloved by the goddess Ištar, wherein exist the shrines of all the gods and goddesses—and in this statement we may see why he thought more of Nineveh than of Dûr-Sarru-ukîn, his father's great foundation—the new city and royal residence did not appeal to him because it was a place of but little religious and historical interest. This view of his favor towards Nineveh is rather confirmed by the words which follow, wherein he goes on to say, that Nineveh is the eternal groundwork, the everlasting foundation, whose design had been fashioned and whose structure shone forth from of old with the writing of the (starry) heavens—practically a claim that it had a divine origin. It was a place craftily wrought, wherein was the seat of the oracle, and all kinds of art-works, every kind of shrine, treasure and thing of delight (?). It was there that the kings his fathers had ruled the land of Assyria before him, and directed the followers of the god Enlil, in which last we may, perhaps, understand the Babylonians as being meant. None of these kings, however, had beautified the city as he had done.

For the work which he had in view, therefore, he brought the people of Chaldea, the Arameans, the Mannites or Armenians, Que and Hilakku (both mentioned as countries, though in the historical part the latter appears as a city), the land of Pilišti or Philistia, and the land of Tyre. These nationalities, which had not submitted to his yoke, he placed in servitude, and they made bricks for the extension and decoration of the city.

The work which first appealed to him was the building of a palace for himself, and to this end he pulled down the former palace, the terrace and foundation of which had been destroyed by the Tebiltu, a violent stream, which since remote days had sought to reach the structure. In order to safeguard it in future, he turned aside the course of the river, and reclaimed, from another stream, the Khosr, a piece of land 340 cubits in length by 298 in breadth. The palace itself was enlarged, when rebuilt to a length of 700 great *suklum* and a width of 440, and he caused palaces (that is, separate sections or divisions of the whole structure) to be built, and adorned with gold, silver and all kinds of valuable woods. To this palace he added a gateway made after the likeness of that of a Hittite palace, and from the excavations which have been made on Hittite sites, it seems probable that this was a special arrangement of winged lions and bulls, such as the Assyrians had themselves been accustomed to employ for decorative purposes. I quote here Sennacherib's words:

> "... a house of double doors (*i.e.*, porch)
> in the likeness of a palace of Hattu,
> I caused to be made opposite its gates."

It therefore seems clear that it is the arrangement which is referred to, and not the ornamentation. The lines which follow are characteristic of the east, the land of sweet odors and precious wood:

"Beams of cedar and cypress,
whose scent is sweet, the products of Amanus
and Sirara, the sacred[2] mountains,
I caused to be set up over them."

In the shrines within the royal chambers Sennacherib opened *âpti birri*, which are regarded as meaning "light-holes," or windows, and in their gates (the gates of the shrines apparently) he set up female winged colossi of white stone and ivory (or perhaps stone of the color of ivory), which bore *illuru* (?columns) and whose claws were curved. "I set them up in their gates, and caused them to pass as a wonderment," says the King. If one might make a suggestion with regard to these interesting objects, it is that they were small and more of the nature of statuettes than of statues, and were in fact possibly the same as that beautiful winged lioness found by the late G. Smith at Nineveh in 1873–74. He describes it as a winged cow or bull (it is restored in accordance with this description) in fine yellow stone, with a human head surmounted by a cylindrical cap adorned with horns and rosette ornaments, wings rising from the shoulders, and a necklace round the neck. On the top of the wings, which stretch backwards, stands the base of a column in the usual Assyrian style. He describes it as being 3 in. high without the feet (which are wanting), 3 in. long and having a breadth of 1½ in. As the face is unbearded it is almost certainly intended for a female, and the absence of any traces of an udder makes it more probable that it is intended for a winged lioness-sphinx rather than a woman-headed cow.

Architectural details concerning the newly-erected palace follow. The recesses of the chambers were lighted "like the day," and the interiors were surrounded with decorative ornaments of silver and copper and with burnt brick and valuable stones, one of them being lapis-lazuli. Some of the great trees used in the construction of the palace had been brought, the king says, from secret places among the mountains of Sirara, their positions having been revealed to him by Aššur and Ištar, lovers of his priesthood. The stone (marble, or perhaps alabaster) used was regarded in the times of his fathers as a fit decoration for the sheath of a sword (implying that it was something rare), and was brought from the land or mountain of Ammanana, and a stone called *tur-mina-banda*, identified by Mr. L. W. King with breccia, which was used for the great receptacles of the palace, came from the city Kabridargilâ on the boundary of Til-Barsip (Birejik). The white limestone used for the winged bulls and female colossi, and other similar statues of alabaster came from the district of the city Balatu, near Nineveh.

These bulls and lions were made in a single piece of stone, and it is noteworthy that the transportation of similar objects, probably for the palace in question, is represented more than once on the slabs from Sennacherib's palace which were discovered by Layard and are now in the British Museum. It does not require a very lengthy inspection of these gems of Assyrian art to realize that they are exceedingly instructive illustrations of the way in which the great Assyrian palaces were built. We see there

[2] Or "the Snow-capped."

the palace-platform being constructed, and the finished and unfinished human-headed bulls being dragged to the positions in which they were to be set up. The king speaks of the perfection of the form of the female colossi of marble:

"Like glorious day their bodies were bright."

and we can easily imagine the imposing effect which they had when they were new and fresh from the sculptor's hands, on the day when the palace was completed.

And here, in the course of his description, Sennacherib touches on another subject, namely, the casting of bronze. When, in early days, he says, the kings his fathers wished to make an image of themselves in bronze to set up in the palaces (or temples) they made all the artizans groan in their construction:

"Without instruction, not understanding the matter,
for the work of their desire,
they poured out oil, the fleece of a sheep
they sheared within their hands."

This, as Mr. King points out, probably refers to some ceremony in which oil and a fleece were used, in order to bring good luck upon the work. Sennacherib, however, through the clever understanding which the divine prince Nin-igi-azaga (the god Ea, patron of handicrafts) had conferred upon him, combined with his own research and inquiry into the matter, was able to make "great columns of bronze," and colossal lions "open of knee"—probably meaning with legs separated from each other, and not joined together with a core of metal.

"By the counsel of my understanding,
and the inquiry of my mind,
I formed the bronze-work, and
made its execution artistic.
Of great beams and framework,
the forms of 12 shining (?) lions,
with 12 bull-colossi
sublime, which were perfect as to form,
(and) 22 colossal heifers, upon whom
was lusty beauty, who were mantled with strength,
and vigor abounded,
according to the command of the god
I made moulds of clay, and
poured copper (bronze) therein—
as in the casting of half-shekel pieces
I completed their formation."

What was the improvement which Sennacherib effected? The want of a precise translation renders this doubtful, but we may, perhaps, guess that he had come to the conclusion that much labor, and also a considerable amount of metal, would be saved by casting these objects as a shell round

a core of clay which, being constructed with a wooden framework, could afterwards be removed, and the same employed over and over again. In any case, the process here detailed is most interesting, and when more is known of the Assyrian technical terms, may even add something to our knowledge of the history of bronze-casting.

Two of these brass colossi, when finally produced, were overlaid with what is suggested to have been gilding, and were placed with others of limestone and male and female colossi of alabaster, in the gates of the palaces. Numerous other details concerning the colossal bulls and lions which the king caused to be made follow, and he states that he made columns of bronze, and also of all the different kinds of wood which the Assyrians regarded as precious, for which the colossi seem to have formed supports, and the whole was erected as colonnades (?) in "his lordly dwelling." After this come references, apparently, to the bas-reliefs which the king caused to be carved, the slabs being decribed as having been produced wonderfully, and if this be the true rendering, the specimens in the British Museum confirm Sennacherib's words concerning them—they are wonderful.

Next comes Sennacherib's account of the irrigation works which he constructed. In order to have water daily in abundance, he caused swinging beams and brazen buckets to be fashioned, and having set up the necessary framework over the water-reservoirs and attached them thereto they were used for the watering of the fields and plantations. Here we have a description of that well-known eastern apparatus, the *shadouf*, which Sennacherib would seem to have introduced into Assyria—it is said from Egypt.

> ". . . Those palaces I caused to be produced beautifully—
> as for the vicinity of the palace, for the wonderment of multitudes of men
> I raised its head—'The Palace which has no rival'
> I called its name."

And then comes the description of the surroundings of the palace—the great park or plantation "like Mount Amanus" which he laid out, wherein were all herbs and fruit-trees, trees produced on the mountains and in the land of Chaldea (a plain low-lying and flat), and trees bearing wool. This, as my former colleague of the British Museum points out, must be a reference to the growing of cotton, as is shown by the statement, that it was used for the fabricating of clothing.

At this point he quits the references to his palaces, and speaks of his work on the city of Nineveh. From former days, he says, the area of its circuit had been 9300 cubits, and the princes going before him had not built an inner and an outer wall. Here we have two rather surprising statements. for this estimate of its area is too small to accord with what we have learned from ancient writers, and the absence of defensive walls is not what we should have expected from the Assyrians. If true, however, it would show how remarkably confident they were that the city would not be taken by an enemy—it must have been indeed the city of a nation which trusted in its own power.

This state of things, however, he immediately proceeded to rectify, for he states that he increased the size of the city by 12,515 cubits, and from this portion of the record we gather that the *suklum* and the *âmmat* or cubit were the same. The great wall, of which he records the laying of the foundation, he called "The Wall whose glory overthroweth the enemy." He made its brickwork 40 (? cubits) thick, which would probably not greatly exceed the estimate of the late George Smith, who reckoned it at about 50 ft., but added that excavation would probably decide that point—and we may add, that it would also, perhaps, decide the measure of the *suklum* or *âmmat*. The height of the walls he raised to 180 *tipki*, which, according to Diodorus, should amount to about 100 ft. These were pierced by 15 gates:

"To the 4 winds 15 city-gates,
before and behind, on both sides,
for entering and going forth,
I caused to be opened in it."

Then follow their names, with which, though they are sufficiently interesting, I will not tire you. As specimens of their nature, however, it may be mentioned that the gate of the god Aššur of the city of Aššur was called "May Aššur's viceroy be strong;" whilst "The Overwhelmer of the whole of the enemy," was the name of the gate of Sennacherib of the land of Halzi—an indication, perhaps, of Sennacherib's birthplace. The gate of the Mesopotamian city of Halah was called "The Bringer of the produce of the wooded Heights." The gate of Sin, whose name forms the first element of Sennacherib's own name, was called "Nannar (= Sin) the protector of the crown of my dominion," the moon god being "lord of the crown" in Assyro-Babylonian mythology. What would correspond with the "water gate" was called "Ea, the director of my water-springs;" and the Quay-gate was named "The Bringer-in of the tribute of the peoples." Interesting, also, is the name of the gate *Pakidat kalama*, "The guardian of everything," which was the gate of the tribute-palace or armory—possibly a kind of museum wherein were placed all that the Assyrian king regarded as curious or precious in the way of tribute, gifts, and trophies. The identification of the 15 Ninevite gates will add much to the interest attaching to the site of that ancient city.

Following on this, Sennacherib described what he did in the way of constructing the outer wall named *Bad-nig-erim-hulhula* in the old Sumerian language, which he interprets as meaning "that which terrifies the enemy." This wall was constructed with foundations of enormous depth—as far down, in fact, as "the waters of the underground courses," at which point blocks of stone were placed as a foundation, and it was then carried up to the height fixed upon for the coping with further massive blocks. The object of the wall's great depth was to frustrate attempts at undermining in case the city should be besieged—a vain precaution, if the accounts of the taking of Nineveh be true, for it is said that some part of the wall was undermined by one of the rivers flowing near, and fell down; and that it was through the breach thus formed that the allied forces of the Medes,

Babylonians and others, entered. "I made its work skillfully," the king then says, as if satisfied with what he had done.

He then returns to the city itself, the area of which he enlarged, broadening its open spaces, and making it bright "like the day"—an improvement which Oriental cities often need. Above and below the city he then constructed plantations, and placed therein the vegetation of the mountains and the countries around—all the sweet-smelling herbs of the land of Heth (Palestine and Phœnicia), and certain plants called *murri*, among which, more than in their native places, fruitfulness increased. These and other plants he set therein, and planted them for his subjects—probably the higher, rather than the lower, classes of his people. A description of what he did to improve the water-supply for these plantations, and wherewith, at the same time, apparently, he watered all the people's orchards, and a thousand cornfields above and below the city, forms a fit conclusion to this portion of the narrative.

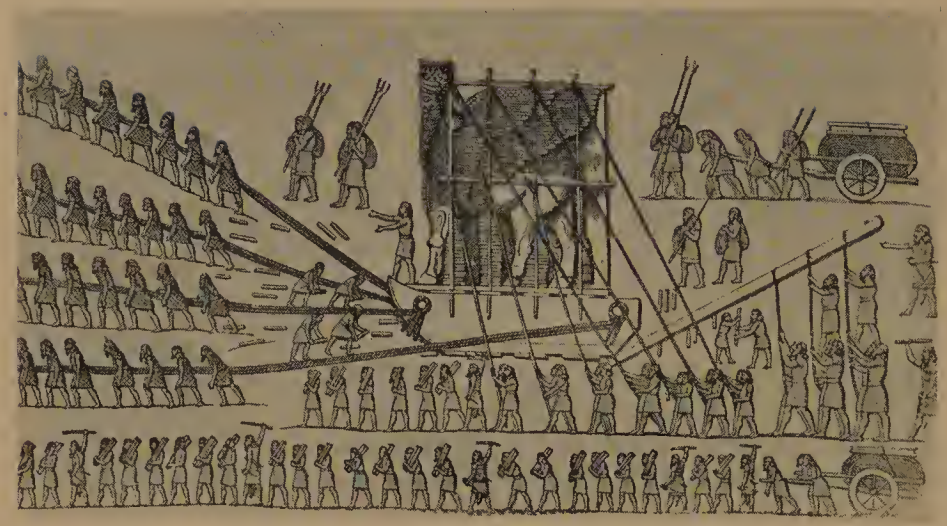
To retard the current of the river Khosr the king constructed a swamp, in which its waters lost themselves. Reeds and rushes were planted within it, and wild fowl, wild swine and apparently deer placed therein. All the trees which he planted throve exceedingly, in accordance with the word of the god. The reed-plantations prospered, the birds of heaven and the wild fowl of distant places built their nests and the wild swine and forest-creatures spread abroad their young. The trees useful for building he used in the construction of his palaces—the trees bearing wool they stripped, and beat out for garments.

To celebrate the completion of the work a great festival was held, worthy of such a king, who, whatever may have been his conduct with regard to other nations, seems to have attended well to the needs of his own people. Assembling the gods and goddesses of Assyria in his palace, numerous victims were sacrificed, and gifts were offered. There was oil from the trees called *sirdû* (which may therefore have been the olive), and there was produce from the plantations more than in the lands whence the trees therein came. On that occasion, too, when the palace was dedicated, he saturated the heads of the people of his land with oil, probably from those trees, and filled their bodies with wine and mead. The inscription ends with the usual exhortation to those "among the kings his sons, whom Aššur should call for the shepherding of land and people," to repair the wall when it should fall into ruin; and having found the inscription inscribed with his name, to anoint it with oil, sacrifice a victim, and restore it to its place. "Aššur and Ištar will hear his prayers."

After this pious wish comes the date:

"Month Ab, eponymy of Ilu-itti-ia, governor of Damascus."

In all probability many will say that we have here a view of the great and (it must be admitted) cruel conqueror in an entirely new light, namely, as the benefactor of his country. And if what he states be true, the question naturally arises: What modern ruler could say that he had done as much for his capital as Sennacherib claims to have done for Nineveh? And who shall say that he claimed unwarrantedly to be the benefactor of



TRANSPORTING A WINGED BULL. DRAWING BY HAUPT

the great city? The sculptures from his palace exist to confirm his record. We see the winged bulls, of colossal size, lying down in the sledges on which they were transferred from the quarries to the site of the palace, sometimes placed uprightly, and carefully propped up to prevent damage by breakage. The sledges, which the Assyrians called ships or boats, are being dragged and forced forward by means of enormous levers upon rollers by armies of workmen, the captives taken in his warlike expeditions—Armenians, Phœnicians, Tyrians, Cilicians, Chaldeans and others, driven to strenuous effort by the whips of unsparing taskmasters and the loud voices of the directors of the work. In the background, behind the slaves toiling at the great cables and the levers, we see the soldiers of the guard, and behind these again extensive wooded hills. In other sculptured pictures, however, it must be the pleasure-grounds of the palace which are represented, with a row of trees, alternately tall and short, in the distance. This scene is placed on the banks of a river, whereon we see boats, and men astride on inflated skins. At another point we see the great king himself in his hand-chariot, superintending the work. Here the background consists of reeds and rushes, and we see the deer to which he apparently refers, and also a wild sow with a litter of young. One of Layard's pictures, which is described as a representation of an "Obelisk or stone in a boat," implies that these boat-like sledges were made to float or to be moved on land by means of the rollers referred to above. In this case the "boat" is in the water, and being dragged by long rows of laborers, many of whom are naked, and all seem to be toiling in the water. The ropes attached to the boat-like sledges or rafts are excessively long, and even in the incomplete state of the slabs as Layard saw them, 36 men to each may be counted. The great pioneer of Assyrian exploration gives, in his *Monuments of Nineveh*, second series, an excellent drawing of a winged bull and human figure from one of the gates of the old wall of Nineveh, showing, if any proof were needed, how very excellent the work of Sennacherib's sculptors was. It is said that some of the remains seen by Layard on the spot have been since his time

destroyed, and if this be the case, it is a deplorable loss. Fortunately we have Layard's drawings, and know what they were like.

George Smith, in his *Assyrian Discoveries*, gives us a good account of Nineveh. He states that the north wall measures about $1\frac{1}{2}$ miles, the south rather more than half a mile, the east wall about $3\frac{1}{4}$ miles and the west over $2\frac{1}{2}$ miles. No extension of the city outside the walls seems to have been recognized by the Assyrians, except that called *Rêbit Ninua*, probably meaning "the extension of Nineveh," which seems to have been on the north, stretching towards Khorsabad. It has been identified with great probability, as the biblical Rehoboth-Ir. In the Book of Jonah, however, Nineveh is stated to have been an exceeding great city of 3 days' journey, and that being the case, the explanation that Calah on the south and Khorsabad on the north were included seems very probable. The distance between those two extreme points is about 30 miles, which at 10 miles a day, would take the time required. Ovid, in his story of Pyramus and Thisbe, states that the tragedy which he relates took place near the pyramid at the entrance of Nineveh. This was the traditional tomb of Ninus, and may well have been the great temple-tower excavated by Layard at Calah, in which he found a long passage, the original object of which was difficult to determine, and it cannot be said therefore whether it had ever been used as a tomb or not. It is to be noted, moreover, that in Genesis x, 11, 12, Resen, between Nineveh and Calah, is described as being "the great city." As it seems never to be spoken of in the inscriptions (the only Resen mentioned having lain seemingly on the north of Nineveh proper), it could not have been a city of any dimensions, and this parenthetical description may therefore refer to all the sites mentioned. As Jonah's missionary visit to Nineveh took place during the reign of Jeroboam II, 783–743 B.C., Khorsabad must be excluded; but perhaps the extent of the united cities, "Nineveh, and Rehoboth-Ir, and Calah" (with Resen), was sufficiently great for a 3 days' preaching journey without taking in the northern foundation of Sargon.

THEOPHILUS G. PINCHES.

London, England.

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WORK OF THE ANTHROPOLOGICAL SECTION IN THE NEW YORK STATE MUSEUM

WITH the erection of a new State Education Building in Albany in which the State Museum of New York has its new quarters, it became necessary for the Anthropological Department to devote its energies almost entirely to preparing its exhbits for the new quarters. This has consumed a large portion of the activities of the members of this Department.

During the period, December 1 to April 1, a large portion of the time was given to corresponding with representative men throughout the State, with the idea of getting every locality in which there had been found any Indian remains enumerated and described. Several hundred new sites were recorded in connection with this survey, a "census" of the numerous collections within the State was taken, so that the State Museum now has the card index of nearly all the collections, large and small, within its field. The work incident to the preparation of the 6 large ethnological groups is being continued.

Ten new life casts of Indians of the various Iroquois tribes have been added to the number already in the possession of the Museum, which now totals more than 40. Large paintings representing typical scenery connected with Iroquois history and occupation have been prepared; the last one being a painting 50 ft. in length and 20 ft. in height, painted on the spot and depicting the site of Champlain's Battle with the Oneidas in 1615. This painting will form the background of the Oneida Industrial Group, which represents a group of Indians posed in front of a bark lodge within the stockade of the old Oneida village. The figures which are life casts represent certain Iroquois activities as follows: pottery making, basket making, weaving, stone chipping, wood carving, and the making of clothing.

Several archæological collections have been added to the museum accessions, but during the year, on account of other activities, there has been no field work in this line.

The studies of the wampum codes of the Iroquois and further research in the traditions and ceremonies has been continued with success. This branch of the work has suffered a great loss through the death of Mr. Albert Cusick of Onondaga, for many years the Indian collaborator and authority of Dr. Beauchamp, and earlier, of Horatio Hale; and of Chief John Gibson of the Grand River Reservation in Ontario, who supplied much information for the Bureau of Ethnology, the Ontario Provincial Museum and the State Museum.

During the year the Archæologist submitted to the Education Department a report of his investigations into a "new religion" of the Iroquois and within the next few months, the document will appear in published form under the title, *The Code of Handsome Lake.*

ARTHUR C. PARKER.

BOOK REVIEWS

THE DECIDING VOICE OF THE MONUMENTS IN BIBLICAL CRITICISM[1]

THIS work of one of the consulting editors of the RECORDS OF THE PAST, though prepared for the specific purpose of showing the agreement between Biblical records and the discoveries made by explorers in Bible lands is of equal interest to those who are engaged in purely archaeological and historical investigations. One reads the book with that assurance which can come only from the fact that the writer has first hand knowledge of the subject of which he is treating. For many years Dr. Kyle has been engaged with field workers, especially with Naville and Petrie in their exploration and interpretation of Egyptian monuments. His publications in European archæological journals have given him a high position among archæologists. In addition to his work in Egypt he has personally traversed the Sinaitic Peninsula and almost every corner of Palestine. It is of the greatest importance, therefore, to have such an authority give us a complete summary of well accredited archæological discoveries which bear upon the purported historical statements which have come down to us through the sacred literature of the Jews.

The volume consists of three parts, the first treating of the Function of Archæology and Criticism, the second of the History of the Testing of Critical Theories by Archæological Facts, and the third of the Progress of Archæological Research in Testing the Biblical Narrative and Settling Questions Raised by Criticism. We must content ourselves with a brief statement of the most important facts that are shown by our author to have been established by archæology concerning the progress of events during the few millenniums which precede the Christian era.

Archæology teaches us that the rise of civilization was in Babylonia, but that the Sumerians or Accadians with whom this civilization originated were not a Semitic people and did not have either the language or the physiognomy of Semites. Civilization in Babylonia first emerged under the leadership of Nimrod, "the mighty hunter," of Hamitic descent.

The original inhabitants of Canaan were not Semitic people but the civilization in Canaan in Bible times was an imported Semitic civilization.

The Babylonian domination in Palestine, about 1800 B.C., as indicated by the fourteenth chapter of Genesis, is amply supported by the circumstantial evidence found on the Babylonian monuments. The beginning of this domination in Palestine goes as far back as the time of Sargon I, whose generally accepted date was about 3800 B.C. The Code of Hammurabi reveals a high state of political and social organization at about 1800 B.C., showing that Palestine "so far from then being a semi-barbarous land was

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[1] *The Deciding Voice of the Monuments in Biblical Criticism.* By Melvin Grove Kyle, D.D., LL.D., Lecturer on Biblical Archæology in Xenia Theological Seminary, Archæological Editor of the Sunday School Times, etc. Pp. 325, 8vo, cloth. $1.50, net; postage, 15 cents.

under one of the simplest and most orderly and symmetrical codes of civil and criminal laws ever enforced in any land" (p. 206). Numerous practices allowed by the common law of the Jews at that time betray the existence among them of regard for the precepts embodied in the laws of Hammurabi. Among these may be mentioned the practice of adoption, of betrothal, and the bestowment of marriage dower, and the power of life and death bestowed upon the father, and the methods of legal contract.

We find that a postal system which reached as far as Palestine had been established in Babylonia in the time of Naram-Sim about 3700 B.C.; that pottery of beautiful shape and exquisite workmanship was then manufactured in abundance. In Canaan in the time of the Patriarchs there was "such a collection of oriental articles of luxurious refinement as could not be duplicated and scarcely approached in richness by robbing all the museums of today" (p. 211). Among the booty gathered by Thothmes III in Canaan during the Israelite sojourn in Egypt are "inlaid and gilded chairs and tables and a golden plow and scepter, richly embroidered clothes, a chariot chased with silver, jewelled tent-poles, gold-plated chariots, iron armour inlaid with gold, and a helmet of gold inlaid with lapis-lazuli" (p. 211).

From the Tell Amarna tablets we learn that the cuneiform language of Babylonia was extensively employed in correspondence in Palestine and Egypt, some time before the conquest of Palestine by the Israelites. Evidence is accumulating that for 5 centuries before the Exodus Lower Egypt was ruled by Bedouin princes (for such were the Hyksos) whose capital was at Zoan, thus accounting for the ready reception which was accorded to Abraham, Jacob, and Joseph by the Pharaohs of Egypt. Conclusive evidence of the prevalence of a Semitic language among the inhabitants of the region about Zoan was long ago discovered by Brugsch and within the last year Petrie and Kyle found evidence of Hyksos occupation of Lower Egypt in the ruins of Heliopolis.

"In the tomb of one Baba at el-Kab, now unfortunately much mutilated, is an inscription of the time of Se-Kenen-Ra-Taa III, a vassal king of Upper Egypt under the Hyksos rulers Exact dates are here impossible, but the time of this king and of this inscription is known to be about the time of Apophis, the traditional Pharaoh of Joseph according to Syncellus. Thus far none of the identifications between the story of Baba and the history of Joseph are absolutely certain, but when we read the inscription as it appeared in Brugsch's day the parallelism of the two accounts of certain events in the empire becomes most suggestive. Baba says 'I collected corn, as a friend of the harvest god. I was watchful at the time of the sowing. And when a famine arose, lasting many years, I distributed corn to the city each year of famine'" (pp. 225, 226).

"The coming of Asiatics into Egypt before the time of Jacob is pictured in the tomb of Khnem-Hotep of the XIIth dynasty at Beni Hasan. The similarity of this scene to the entrance of Jacob and his sons with their retinue into Egypt is so strikingly exact that for a long time in the earlier history of Egyptology this was believed to picture that patriarchal event" (pp. 226, 227).

"This whole history of the descent into Egypt is most essentially reasonable and credible. Undoubted identifications confirm the topographic and ethnic notices in the patriarchal story; Egyptian descriptions substantiate the manners and customs depicted in the Bible; Egyptian scarabs confirm even the name 'Jacob' for that period in Egypt; Egyptian history furnishes a similar famine story; and attests the 'abomination' in which 'shepherds' were held and the Egyptian funeral customs most exactly illustrate the funeral and mourning for Jacob. This part of the patriarchal story fits, in every way, exactly into the age and the lands to which the Bible attributes it" (p. 228).

The Tabernacle in the wilderness with its furnishings and symbolism reflects Egyptian ideas and coloring. "The main features of its architecture are the main and unvarying features of Egyptian architecture in the humble home of the peasant, in the palace of the prince, in the tomb, the home of the dead, and in the temple, the home of the Gods" (p. 239).

Among the interesting confirmations of the early date of the Pentateuch is the "presence and peculiar use of certain Egyptian words scattered all through the various parts of the Pentateuch. These words are of such unusual meaning and of such temporary use in Egypt, belong so peculiarly to the place and the times and are used with such absolute accuracy throughout the Pentateuch, that it is incredible that scribes of a late period in Israel's history could have attained to such linguistic nicety. The passages in which these words occur must have come from the Mosaic age the only age when some of them were employed in Egypt" (pp. 249, 250).

"When the archæological data of the Mosaic age are laid all along the course of the Pentateuchal narrative, it is found to be so uniformly harmonious with that narrative, with the customs, the institutions, the topography, the itineraries, and the history, as far as these are known, all the way from the shadows of Hebrew slavery in Egypt to the fifth year of Meremptah and the turning back from Kadesh Barnea, as to make one marvel that different authors in different centuries should have been so uniformly successful in the representations of historical fiction" (p. 251).

But space fails to enumerate the archæological discoveries bearing upon Biblical history, relating to the nations with which Israel came in contact. Egypt, Philistia, Moab, Syria, Assyria, and Babylonia are vividly brought to light by archæological discoveries in a way which parallels the Biblical history in a remarkable manner. The volume while scientific in character is popular in style, and appeals to a wide class of readers.

GEORGE FREDERICK WRIGHT.

EL BUWAIB—EASTERN ENTRANCE TO THE OASIS OF FEIRAN

From *From Nile to Nebo*

FROM THE NILE TO NEBO[1]

AFTER a study of its problems for a period of a quarter of a century, the author presents a timely treatise upon the subject of the Exodus. It is a volume which will be carefully read by all students of the modern literature on the Pentateuch.

A thorough knowledge of the Arabic language, and extended journeys through the country, together with an acquaintance with the people and their habits and customs, as well as a careful study of the extensive literature which has been produced upon this region, have peculiarly fitted Dr. Hoskins to make this study of the Bible in the land where it had its origin. No one has had such splendid opportunities, for too many others who have written upon the subject have been permitted to see only portions of the land, and after laborious preparation at home, their time on the ground has been much too short.

In this book, the narrative and the discussion of the theories is skilfully interwoven, so skillfully in fact that even the ordinary lay reader will not skip over the chapters upon chronology, the numbers of the people, or the study of the documents of the Pentateuch.

While the volume is a description of a journey, it is something more. It contains at their proper place in the narrative, a serious discussion of deep questions of great importance to Bible students, and it does not lose any of its serious purpose through its lucid style, which is not the means of hiding its content from the comparatively untrained. It is a book which will strengthen the faith of its reader, and will not undermine his confidence in the Bible as a record of facts. Its tone of progressive conservatism is refreshing today when destructive criticism seems to occupy the center of the stage. Its sane and wholesome positions do not detract from its value as a critical work, and it is destined to be distinctly helpful to those who may have been somewhat disturbed by some modern tendencies.

It is a book which should be in the hands of every Sunday School teacher for it will give them a comprehensive grasp of the history of the Peninsula, and at the same time will explain its connection with the events which took place within its bounds, at a time of greatest importance to the human race.

The journey upon which the narrative is based extended from Egypt to Syria a distance 1900 miles, through the Sinaitic Peninsula, Mount Seir, Edom, Moab and Amman and ended at Jericho. The illustrations, many of which are quite striking, are mainly the work of the author, and are very helpful in understanding the arguments presented.

WILLIAM LIBBEY.

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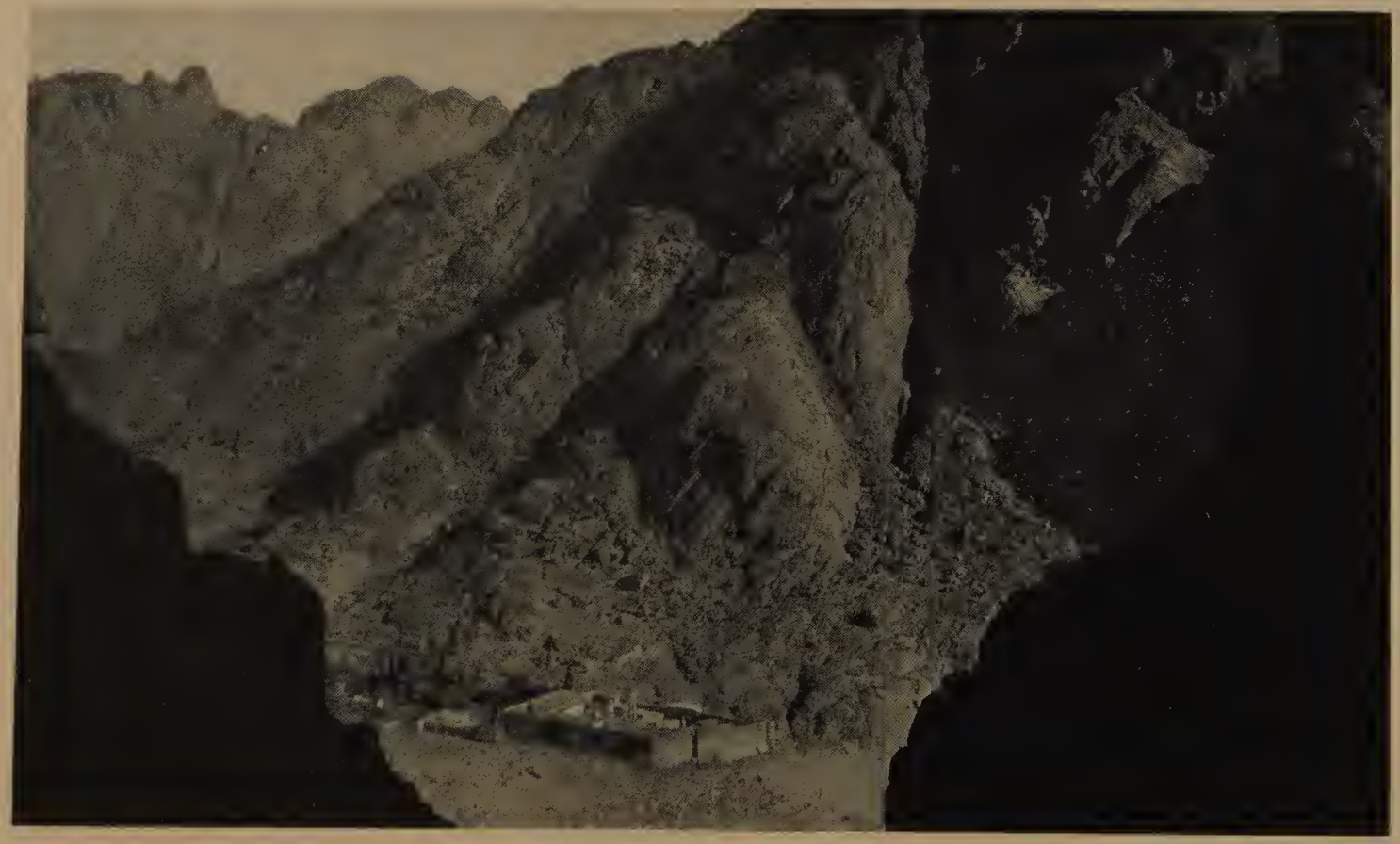
[1] *From Nile to Nebo: A Discussion of the Problem and the Route of the Exodus.* By Franklin E. Hoskins, D. D. Pp. 378, 85 illustrations. Map. $3.00 net. Philadelphia: Sunday School Times Company. 1912.



A VIEW OF THE MONASTERY FROM A POINT ON THE "STAIRWAY"

From *From Nile to Nebo*

JEBEL MUSA, PILGRIM GATE AND A BIT OF THE STAIRWAY

From *From Nile to Nebo*

EDITORIAL NOTES

SOCIÉTÉ DES AMÉRICANISTES DE PARIS.—Prof. George Grant MacCurdy of Yale University has been elected a Corresponding Member of the Société des Américanistes de Paris.

CORRECTION.—In the article on *The Cayuga Chief, Dr. Peter Wilson* in the last issue of RECORDS OF THE PAST (vol. xi, p. 263) the parenthesis (or according to a letter from Rev. Dr. Wm. T. Beauchamp, she married Daniel Two-Guns) by error was placed so that it referred to Lucy Wilson. It should have been placed so as to refer to her mother Maria Wilson.

AMERICAN ANTHROPOLOGICAL ASSOCIATION.—At the recent meeting of the American Anthropological Association held in Cleveland, Ohio, the following officers were elected: President, Prof. Roland B. Dixon, Harvard University; Secretary, Prof. George Grant MacCurdy, Yale University; Treasurer, Mr. B. T. B. Hyde, New York; Editor, Mr. F. W. Hodge, Bureau of American Ethnology.

BURIAL URN FROM ESSEX.—"A burial urn was recently found at Mistley, Essex. It belongs to the bronze age and is a very good specimen. The bones in it are pronounced by a doctor to be those of a full-grown man. The probable date of the burial was about 600 B.C. It is hoped that the urn will ultimately be deposited in Colchester Museum; but the matter has not yet been finally settled."

DR. MACKENZIE TO GO TO EGYPT.—Dr. Duncan Mackenzie finished his work at 'Ain Shems in August last and then went to Athens to write his report. When about to leave, he received a contribution which enabled him to continue the excavation of the cave at the "High Place" of Beth Shemesh, which otherwise could not have been done. When this work is finished, Dr. Mackenzie will go to Egypt where he will undertake excavations in the Soudan.

THREATENED DESTRUCTION OF MOUNDS AT BELLEVILLE, ILL.—We sincerely hope that the citizens of St. Clair County Illinois, will be successful in their efforts to save intact the entire group of mounds southwest of Belleville which are threatened with destruction by a railroad project. Their proposition to have the tract of land converted into a State park is specially fitting. This great center of the Mound Builders activity should be left undisturbed as far as is practical, and not only the citizens of that immediate vicinity but of the whole country should demand that adequate protection be given them.

MAPPING THE MAYA COUNTRY.—Mr. R. H. Millward last spring did some exploring in the district of Peten, in Guatemala. He

studied and photographed ruins and temples and laboriously mapped the extent of the Maya empire. The architecture partakes of a Mongolian type. According to Mr. Millward, the most recently deciphered hieroglyphic texts indicate a culture as old as that of Egypt. One old chronicle relates that when Cortez arrived there were trees more than 1000 years old growing on some of the ruins. More than 300 groups of ruins were encountered by Mr. Millward.

ROCK-INSCRIPTION OF SENNACHERIB.—At the meeting of the Society of Biblical Archæology on November 13, 1912, Mr. L. W. King of the British Museum spoke on *Some Unpublished Rock-Inscriptions in Turkish Kurdistan*. These were on the Judi Dagh, east of the Upper Tigris, where Mr. King came upon them in 1904. The inscriptions are the work of Sennacherib and are far from any great center of population or caravan route. They seem to have been placed purposely as near the top of the mountain as possible, for it was hostile territory. They commemorate a successful campaign between 698 and 695 B.C. These new texts prove that the Mount Nipur of the Assyrian inscriptions is not in Cappadocia but is really Judi Dagh. The position of a number of towns is settled also. Sculptures accompanying the inscriptions represent the king in the conventional attitude adopted on the bas-reliefs of the period.

EXCAVATIONS IN BOLIVIA.—The Bolivian Minister of Public Instruction has provided funds for the systematic excavation of Tiahuanacu, in order to save the archæological material from further depredations such as have been carried on in the past. The Director of the National Museum, Dr. Otto Buchtien has the work under his supervision. A report of the work already done has been issued. At a depth of from 3 to 10 ft. much pottery was found of pre-Inca age, many objects being in good condition. The material is fine, and many of the cups and bowls are artistic in form and the coloring is excellent. A great variety of ideographs and pictographs are represented. A human figure in silver is interesting as showing the nature of the garments worn in that ancient time. Worked stones have been found as well as skulls showing traces of deformation. One skull, belonging apparently to an ancient race, shows the frontal suture and is larger in all dimensions than skulls of the present.

CAVE-PAINTINGS IN WALES.—In October it was announced that Professors Breuil and Sollas had discovered a prehistoric cave-painting in a cave called Bacon's Hole, near the Mumbles, Wales. It consists of 10 horizontal bands of vivid red arranged in a vertical series of about 1 yd. in height. A deposit of stalactite has formed over them, so that none of the paint can be rubbed off. The two professors had been searching the caves of the coast of Gower for undoubted Aurignacian implements, and, having found them, hoped to find paintings. Some have tried to discredit this discovery, but the two men are agreed that the paintings are ancient. Professor Sollas is reported to have made a special visit to verify his former observations of stalactite formation. He found

it there, and with hammer and chisel detached a fragment of the painted surface, thus getting a section through the deposit. The paint is on an old layer of stalactite, and is in turn covered by a later layer. A layer 1 mm. thick is sufficient to conceal the paint. The inner chamber of the cave is now kept locked and the painting thus preserved from relic hunters.

DEATH OF ANDREW LANG.—In the death of Andrew Lang, M.A., D.Litt., F.B.A., on July 20, 1912, the science of anthropology lost an untiring worker. He was not merely an anthropologist, however, but a many-sided, great writer—"a detached, unofficial, unendowed man of letters, a knight-errant of the pen. It is true that in this capacity he dealt with all sorts of subjects, touching no one of them without striking fire from it. But it is also true that, when he wrote about anthropology, he put his whole heart into the business. He was not merely versatile in the sense that he could get up a case in a hurry, as a barrister has to do, so as to score a momentary success. He was rather many-souled. He had an extraordinary gift for identifying himself with this and that interest in turn; so that for the time being he was master of the matter in hand, because so completely master of himself, of his mobilised and concentrated powers. His air of carelessness was a harmless pose. He put the best of himself into whatever he was about, a clear proof being that he experienced that joy in his work which is the supreme reward of sincerity."

His first notable work on anthropology was his article on *Mythology* in the ninth edition of the Encyclopædia Britannica. He was then 40 years old. This article won him great fame and was followed in the same year (1884) by his *Custom and Myth* and 3 years later by *Myth, Ritual and Religion*. It is on the side of anthropology which is concerned with folklore that his chief strength lies. His classical scholarship helped him greatly in this field. During the next 10 years no more anthropological work of note came from his pen. Then appeared *The Making of Religion*, *Magic and Religion*, *Social Origins* and *The Secret of the Totem*.

"In order to appreciate his work at its full value, his innumerable contributions to periodical literature must likewise be taken into account. Indeed, his unique gift lay in his power of treating anthropology as an everyday topic belonging to general culture. He was clever in constructive theory, brilliant in dialectics; but perhaps his chief title to fame is that he taught the world that the humanities are not alien to the science of man, nay that it is the common root and parent of them all."

ÉCOLE D'ANTHROPOLOGIE DE PARIS.—The École D'Anthropologie de Paris announces the following courses for the year 1912–1913:

Anatomic Anthropology: Anatomic Characters of Fossil Man. Prof. R. Anthony.

Prehistoric Anthropology: Art and Industry of the Magdalenians and the Neolithic Populations. Prof. L. Capitan.

Zoölogic Anthropology: Appearance of Man in Europe: Hypotheses as to Anthropogenic Centers. Prof. P. G. Mahoudeau.

Ethnology: Study of Mendelian Heredity—Facts, Laws, Anthropologic Applications. Prof. G. Hervé.

Physiologic Anthropology: Intelligence in the Human Species, according to Race, Sex, Age, Social Categories, and the Individual. Prof. L. Manouvrier.

Comparative Ethnography: Origin and Evolution of Clothing and Ornament. Prof. A. de Mortillet.

Sociology: The Social Maladies. Prof. G. Papillault.

Anthropologic Geography: Geographic Relations in Prehistoric and Historic Times. Prof. F. Schrader.

Ethnography: The French Colonies, Morocco, Central Africa. Prof. S. Zaborowski.

Linguistics: History of Linguistics, The Higher Languages. Asst. Prof. J. Vinson.

Series of Special Lectures by Dubreuil-Chambardel, Franchet, Kollmann, and Paul-Boncour.

PHILISTINE CITY OF ASKELON.—The Palestine Exploration Fund *Quarterly Statement* for January, 1913, contains an exceedingly interesting article by Dr. Mackenzie on *The Philistine City of Askelon*. After a vivid description of his journey to the site in 1911 and the present status of the remains, he gives in detail the strata exposed by the action of the waves. The sea is destroying the Crusader walls and then those of an earlier date; so that what is exposed at one time will soon be destroyed, revealing something else.

At the time of Dr. Mackenzie's visit the natural section revealed 10 strata—pre-Semitic, Early Canaanite, Canaanite, a burnt layer, Philistine, Late Philistine to Roman, Byzantine, burnt layer of Arabic conquest, Crusader and Late Arabic deposits. The stratum next the rock—provisionally called pre-Semitic—shows no wall at this point, but fragments of roughly levigated pottery is found, which might belong to the early part of the bronze age, before 2000 B.C. The Early Canaanite stratum has a wall and in it was found a fragment of wish-bone handle such as is characteristic of bowls with geometric pattern like those found in the necropolis of Agia Paraskevi near Nikosia in Cyprus. This is considered as belonging to the early part of the second millennium B.C. All of which would indicate that this wall was of Canaanite date.

The next stratum—Canaanite—had in the débris distinctive sherds of the late bronze age of strong Semitic stamp. Here was also a fragment of an alabaster vase of Egyptian fabric of the XVIII dynasty or later. The burnt layer indicates a general catastrophe, possibly at the time of the coming of the Philistines.

There was much pottery found in the stratum of Philistine débris. This pottery is similar to the painted Philistine pottery at Tell es-Safi (Gath) and elsewhere.

The later strata did not seem to be as significant as the Canaanite and Philistine layers. Possibly in those earlier eras there was concentration upon the tell next the sea and about the harbor, while the Roman period was one of expansion landwards. Probably, then, what is intrinsically Canaanite and Philistine will be found in the tell and the harbor.

SKELETON AND DRINKING CUP FROM AVEBURY.—On December 2, 1911, one of the standing stones at Avebury fell. This was one of the 2 remaining stones of the original 3 which are supposed once to have formed a cell at the site of Beckhampton, or western avenue, that issued from the great circle of Avebury. This is generally known as Longstone Cove, or the Longstones, but the two stones are popularly called Adam and Eve. It was Adam which fell in 1911. The Wiltshire Archæological Society decided to reërect it, believing that it could be preserved better in that way.

It was necessary first to clear the hole in which the stone had stood. Mr. and Mrs. B. H. Cunnington were entrusted with the supervision of the work and on May 24 and 26, 1912, it was undertaken.

The hole was 13½ ft. long from east-south-east to west-north-west, with its greatest width, 6½ ft., at the easterly end, the opposite end being 4½ ft.; the hole was 3 ft. 8 in. deep, 2 ft. 5 in. of the entire depth being in the solid chalk. The stone had been packed with 150 sarsen stones, some of which were estimated to weigh more than 100 lbs. A large piece had split off the stone and was resting against the southern wall of the hole.

Of considerable importance was the discovery of the remains of a human skeleton and the fragments of a "drinking cup" or "beaker" close in front of the hole in which the stone had stood. The burial was very close to the stone when standing and exactly in the center of its northern side. The burial had been laid on the level surface of the chalk. The bones had been disturbed and broken in the ground so that the original position could not be ascertained accurately, but it was evidently crouched with the head to the east. The majority of the bones and pottery fragments were within a space 3 by 2 ft.

As the soil here is only 15 in. deep, the burial must have been shallow. Possibly, however, a mound was banked up against the stone and subsequently destroyed by cultivation. Cultivation is sufficient explanation of the broken and disturbed condition of the skeleton.

"It is now generally recognized that the 'drinking-cup' type of pottery belongs to the transition from the neolithic, or to the earliest bronze age in Britain, and as it seems clear that the burial must have been made at the foot of the stone after its erection, the importance of the discovery with regard to the date of the monument is considerable. It appears to be good evidence that this stone, and therefore presumably the whole of Avebury, must have been standing at least as early as the beginning of the bronze age in England.

"The 'drinking cup' or 'beaker' of which fragments were found with the bones, is a well-decorated and well-made example of the ovoid cup with re-curved rim, and must have stood not less than 8 in. in height. The ware is thin and baked to a bright red both on the inside and outside of the vessel, showing the grey paste in the middle; the paste is fine and sparingly mixed with sand. The cup was decorated from rim to base with a series of horizontal lines, alternating with rows of herring-bone pattern, and bands of the plain polished surface. The horizontal lines, and the lines forming the herring-bone pattern, are notched, as if impressed by a notched or serrated tool, as is so often the case on this type of vessel."

A fragment of the cup as well as a fragment of Samian ware was found in the loose earth which fell into the hole with the fall of the stone. A fragment of another decorated "drinking cup" was found 2 ft. deep among the undisturbed packing stones. Several pieces of what may be Romano-British pottery were found in the soil round the hole.

The skeleton evidently belonged to a medium sized individual of middle age. A fragment of the collar bone is stained apparently by contact with bronze, but no fragment of that metal could be found. The pottery fragments and the bones will be placed in the Museum of the Wiltshire Archæological Society at Devizes.

VITCOS, THE LAST INCA CAPITAL.—Prof. Hiram Bingham, director of the Yale Peruvian expedition in the *Proceedings of the American Antiquarian Society*, 1912, gives an interesting account of the last days of the Inca rule, quoting largely from early Spanish records. He follows this with a description of his search for the ruins of Vitcos, the last Inca capital. With these descriptions well in mind he set out and was successful in finding ruins which correspond remarkably well with the descriptions. Although he admits that all the possibilities have not been exhausted yet he feels reasonably certain that he has discovered Vitcos, the capital and the Temple of the Sun where early chroniclers say the "Devil appears in visible form and was adored by these idolators."

We quote Professor Bingham's description of Rosaspata which he identifies with the capital and Ñusta España which he considers the ruins of the Temple of the Sun:

> Leaving the ruin of Uncapampa with my Indian helpers I climbed back on to the ridge, found a path along its west side and came to the ruins of Rosaspata. Passing some ruins very much overgrown and of a primitive character, I found myself on a pleasant open plaza, bounded on its north side by the ruins of a large palace.
>
> The view from the plaza is a particularly extensive one on all sides. To the north and south are snow capped mountains, and to the east and west deep beautiful valleys. The long palace. . . . . is 245 ft. long and 43 ft. wide. There are 15 doors in front, and 15 doors behind, but none in the ends. There are no windows. It is divided by halls into 3 divisions. The front entrance to each hall is a particularly well made door, containing a reëntrant angle. These 3 principal doors and the other lesser doors are all of white granite, rather carefully squared and finished. The lintels of the doors are solid blocks of white granite from 6 to 8 ft. in length. Most of them have been destroyed but enough remain to give a good idea of its former grandeur. The walls between the doors are not so carefully made and the stones have not been squared. Only a few niches remain, so that it is impossible to say whether there were niches in the entire building. There are also a few cylindrical projecting stones, as at Choquequirau. What niches there are have been carefully made. Altogether it is a suitable building for the residence of a king. A very small portion of wall stands as it did originally. Most of the rear doors have been filled up with stones taken from the ruins in order to make a continuous wall. New walls have also been built to divide the hill-top into pastures. There is considerable grass here and we saw a number of cattle. There is some evidence of a considerable amount of digging having taken place near the walls and of the wanton destruction of many in efforts at treasure hunting. The fine doors were much better than any we saw anywhere except at Macchu Pichu.
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> Back of the large palace and a few feet above it on the end of the knoll which ends this part of the ridge of Rosaspata is what might fairly be called a palace-compound consisting of 13 or 14 houses arranged so as to form a rectangle with large and small

courts. The outside dimensions of the palace-compound are about 161 ft. by 146 ft., but it is not perfectly square. The buildings themselves vary from 16 by 22 ft. to 30 by 46.8 ft. A couple of terraces separate the long palace from the palace-compound . . . . On the north side of the larger courtyard there is a niche in a wall which may have been a kind of shrine.

The hill falls very rapidly on all sides and it would have been extremely easy for a small force to have defended the hilltop. . . . .

We had been told that the most interesting place near here was Ñusta España, and that there we would find a great white rock over a spring of water. We arrived at this place at 4 o'clock and were at once impressed by the truth of what we had heard and convinced that this was indeed the sacred spot, the center of idolatry in the latter part of the Inca rule, according to Father Calancha. The rock was so much overgrown and surrounded with jungle, especially on two sides, that we made arrangements with the Lieutenant-Governor to have a force of Indians come here the next day and clear the rock so that we could take photographs and make measurements of it. . . . .

Ñusta España, or as it was called in early Spanish colonial times, Yurak Rumi, is a white granite boulder, 52 ft. in length, 30 ft. in width, and 25 ft. high above the present level of the water and swamp that surround it on the east and south sides.

On the south side of the monolith 4 or 5 small seats have been cut in the rock and several large seats. Viewed from this side the rock looks not unlike a miniature mountain. This was probably its natural shape although nature has been helped to a certain extent. Great care was exercised in cutting out the seats and the edges are very nearly square and almost straight. In several places on the rock square projections have been left in bold relief projecting from 4 to 8 in. The east side of the rock projects over the spring. A stone platform comes down to the water's edge. Near the water steps have been carved. Two seats have been carved out of the rock immediately above the spring. On the north side the rock has evidently been flattened artificially and carved into a rough relief. There are 10 projecting square stones like those usually called *intihuatana* stones. Seven of them in a line have been carved out of the face of the rock. The *intihuatana* stones are about 8 in. square. No two of them are exactly alike. It must have required great labor to carve these out of the flat face of the rock 12 ft. above the water. If the projecting stones were intended to cause a shadow, it is significant that they were placed on the north side of the rock where they would always be exposed to the sun. On the west side there are more seats and large steps. On top of the rock there is a flattened place which might have been used for sacrifices. From it runs what looks like a little crack in the boulder (local tradition says this mark was made by a little princess) which has been artificially enlarged. It is possible that this was intended to drain the blood of the victim killed on top of the rock. This shows in several of the photographs, as rain-water flowing down this crack has kept moss from gathering there as it has gathered over most of the monolith. . . . .

The surroundings are impressive. Densely wooded hills rise on both sides. It is a secluded spot, well calculated to impress the imagination of the worshippers. There seems to be no doubt that this was a sacred place. Furthermore, as I have said, about one-fourth of the boulder overhangs a spring of clear water. Surrounding this are the ruins of houses, probably the House of the Sun, once occupied by the priests who officiated at the ceremonies described by Father Calancha in his *Chronicle*. The important thing to us in this connection is that he said: "*Joined to Vitcos is a village which is called Chucipalpa, and a House of the Sun, and in it a white stone on top of a spring of water, where the Devil appears in visible form and was adored by these idolators, this being the principal mochadero of these mountains.*" The locality where we found the monolith is called Ñusta España or Yurak Rumi and is also known as Chuquepalta.

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RECORDS OF THE PAST

VOLUME XII MARCH—APRIL, 1913 PART II

Vol. XII **RECORDS OF THE PAST** Part II

PROF. G. FREDERICK WRIGHT, D.D., LL.D., Editor Emeritus. FREDERICK BENNETT WRIGHT Editor

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MARCH-APRIL, 1913

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PHŒNICIAN BASE FROM FÎ, NEAR TRIPOLI, SYRIA

RECORDS OF THE PAST

VOL. XII PART II

BI-MONTHLY

MARCH-APRIL, 1913

PHOENICIAN MONUMENTS IN THE MUSEUM AT CONSTANTINOPLE[1]

PHŒNICIAN BASE FROM NEAR TRIPOLI

THE monument reproduced in Figure 1 came from Fî, a village of lower Koûra, south of Tripoli (Syria) not far from 'Anfeh and Cape Théouprosopon. The Lebanon region in which this base was discovered has been but little explored up to the present time. Renan passed through hurriedly and examined only the remains of 'Anfeh, which he described, moreover, indefinitely. Today, when all the Lebanonites returning from America build new houses for themselves, most of them to the detriment of the ancient ruins, a systematic exploration of Phœnicia becomes urgent. In the meantime, it is to the local authorities that there falls the duty of checking the incessant depredations to which the antiquities of the country are subjected.

The base from Fî is a block of limestone nearly square, measuring 1 ft. 7 in. on one side. Upon the upper surface and a little toward the rear, is seen a quadrangular depression about 3 in. deep and about 6 in. on each side. This hole is probably ancient; it must have served as the receptacle for the base of a statue or inscribed stela. The rear face seems to have been left in the rough; the other 3 are ornamented with sculptures.

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[1] The results of studies carried on by the author in the Royal Ottoman Museum in 1910. Translated and slightly condensed for RECORDS OF THE PAST by Helen M. Wright from the *Mélanges de la Faculté Orientale*, Université Saint-Joseph, Beyrouth. V. Fasc. 2. 1912.

Upon the side faces are represented in bas relief sleeping bull-sphinxes, winged and crouching, whose heads and breasts projected in full relief from each side of the principal face. The heads are, unfortunately, much mutilated. Besides these animals, each of the side faces bears, in faint relief and upon a second plane, the silhouette of a capped socle of the classic Egyptian gorge. It is upon this socle that the lost monument, stela or status, was supposed to stand when viewed from the side.

The principal face shows in the first place a scene of adoration. Upon a throne with a high back, represented in profile, and flanked by a winged sphinx with bearded human head, sits a divinity, who at the first glance is identified with the Astarte-Isis of the stela of Byblos, the scepter excepted. Here the goddess is sitting and her general costume is less Egyptian; it is with the left hand that she makes the gesture of benediction, while the right seems to be extended upon her knee or, less probably, upon the head of the sphinx. The ample tunic which covers her falls just to the feet, which are placed upon a foot stool. Before the goddess stands a beardless person, probably a woman, clothed in a long tunic fastened with a girdle; with both hands the figure makes the customary gesture of invocation. In the upper part of the scene, just over the goddess, is displayed a large crescent surrounding a disk.

The second register, which forms the lower band, is occupied by 2 humped bulls, facing each other on each side of the sacred plant, here a species of palm, *très stylisé*.

This piece of Phœnician sculpture evidently came from a good workshop. In spite of the mutilations sustained by the stone, one recognizes the work of an able artisan, copying from good models; the pose of the goddess is marked by a certain majesty; the contour of the bull-sphinxes was traced with a firm hand and the silhouette of the 2 little bulls was rendered with a naturalness which presupposes real observation of nature. It is most unfortunate that we have not the whole monument.

We have compared the image of the goddess to that which adorns the stela of Byblos; but our monument certainly does not date from so remote a time, supposing that the Byblos stela itself dates from the Persian epoch, of which there is some doubt at present. In any case, our base is apparently connected by style and workmanship with the monuments of the Hellenistic epoch discovered in the region of Tyre, in particular with the "throne of Astarte" which it enables us to complete in certain details. Upon this throne, in fact, the heads of the sphinxes have disappeared so one can not tell whether they were bearded; the monument of Fî today furnishes the desired answer.

Does the star symbol above the scene of adoration resolve itself into a crescent and sun disk, or into a crescent and moon disk? The goddess represented upon the stela being Astarte and this symbol seeming to refer to her, one finds himself face to face with a very interesting problem. It is certain that the symbol composed of the crescent and disk may represent the moon alone. M. Clermont-Ganneau has frequently insisted upon this fact of which he has given the obvious explanation, while recalling that in this case the night luminary is seen in the characteristic phenomenon

PHŒNICIAN STELÆ FROM SAÏDA, SYRIA

of the ash-colored moon. This was the Babylonian and Assyrian method of representing Sin and it has been common to other peoples. It seems to mark sharply the points of the crescent and to unite them above by a faint arc of a circle in outline, simple or double, imitating very happily the aspect of the natural phenomenon. Little by little the horns spread, the upper circle disappeared and the figure unfolded itself as it were, presenting nearly the aspect of the symbol of our stela. If, then, this symbol is that of the moon, the mythological system which sees in Astarte a goddess of lunar character is definitely confirmed by our Phœnician monument.

But, someone had already said, if Astarte had been confounded at times with the moon, by means of the syncretism of early epochs, its equivalence with the planet Venus is a permanent fact with the early and late Semites; even during the Roman epoch, Astarte remains fundamentally what she was in the beginning. How shall we explain our symbol then? In his *Notes de mythologie syrienne*, M. Dussaud who, with the majority of orientalists, sees in Astarte the planet Venus, made an effort to show that, in certain complex symbols composed partly of the Egyptian sun disk and partly of a crescent fitting in another disk, the second group ought to be held as the lunar symbol associated with the solar symbol. But, instead of seeing in this group a repetition of the sun combined with the moon, he finds here the sign of the goddess *parèdre* of Baal already represented by the Egyptian sun disk, and this goddess *parèdre* can be no other than Venus-Astarte; the crescent and disk group, then, represents her in her connection with the sun and moon as morning and evening star. Consequently, the stela of Fî would confirm the opinion which sees in Astarte the personification of the planet Venus.

In reality our symbol confirms nothing of the kind. If it be true that the crescent-disk association represents sometimes the moon alone, in many cases there can be no hesitation over the solar value of the disk. It is incontestably the case in our monument. On the other hand, it is entirely unlikely that this association could represent here the planet Venus and this in spite of the very precise place given to the symbol in the scene represented. I do not think that if M. Dussaud had to interpret this symbol he would have positively applied to it the exegesis which we have just noted; the conditions would be different in the present case, since our symbol is not combined with another sun disk. But even if the association were real—and we could ascertain this if our monument were less incomplete—we should be no more warranted in asserting that our symbol represented the goddess *parèdre*, otherwise called Venus-Astarte. There is absolutely no proof of a parallel symbolism and those which M. Dussaud has produced rest upon the erroneous interpretation of very dissimilar monuments which he has connected. Upon the intaglio of Vogue the central figure is simply a repetition of the lunar symbol of the Persian epoch, and the winged disk which surmounted it is the common emblem, almost necessary, of the most diverse Semitic monuments. With regard to the lintel of Oumm el-'Amad—we can say as much of the little column of Tyre—the lower group, composed of a reversed crescent over a disk

does not represent Venus any more that the same group in the opposite position, such as that represented on the lintel of Ṣahîm, of which we have spoken in a preceding study, where we represented it with the wings! The sun disk[2] is then, as well as herself, equivalent to the Egyptian winged disk, and almost the same as the disk side by side with the uræus, but deprived of its wings. It is tautological; but this tautology is exactly one of the characteristics of the symbolism of the Semites, especially the Phœnicians, who have, moreover, in this taken the style from the similar representations of Egypt. We know, well enough, that in this country the symbol of the disk or of the winged scarab has been repeated with a sort of frenzy, upon the same monument, upon the same lintel; it was a way of multiplying its prophylactic powers. The Carthaginians, also the Egyptians when congeners of Phœnicia, could not fail in doing so; also we see, upon their stelæ, that they placed the winged disk sometimes in conjunction with symbols composed of the crescent and sun disk. If one could doubt it about the Phœnicians, it is sufficient to look again at the stela of Tell-Dfenneh, where we find, one over the other, first 2 winged disks, then the symbol of which we are speaking and finally, by a new tautology which shows how far Egypt had influenced her Asiatic neighbors, 2 simple cantoned crescents with the points on both sides of the god. What more proof could we ask? It is, then, obvious that the symbol composed of the crescent and disk could not in any case represent the planet Venus.[3] All the varieties reduce themselves either to the moon alone or to a combination of the sun and moon.[4]

It is in the second category that the emblem of the monument of Fî comes, and we must see here, in short, a simple reduction of this decorative winged disk, which was, according to M. Perrot, the mark of Phœnician manufacture. Why was the crescent added to the sun disk, which would have sufficed by itself? It is to Egypt again that we must turn for answer: the same material association is found there and nothing more was necessary than that it should pass into Phœnicia.[5]

More and more we must give up finding in the Phœnician or Syrian monuments of the early epochs symbolism deep and complicated, in the search for which the historians of oriental religions have delighted during

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[2] The position of the crescent with respect to the disk has no special significance in the question which we are studying; in certain cases it could be intended and could proceed from a symbolism of which no one has yet found the key; but this significance is always secondary so far as the general symbolism of which we speak is concerned, and it is correct to say that more often it did not exist at all in the thought of the sculptors of the epochs to which our monuments carry us. We have dozens of variations, devoid of sense, in the Punic and neo-Punic series.

[3] In the Roman numismatics of Cyprus, the reverse with the type of the temple of the Paphian goddess are sometimes crowned with a crescent embracing a star. This image, they say, ought to symbolize the Cyprian Venus. But one of two things is true: either the star is that of the planet, or it holds the place of the sun. In the first case, we have no longer the desired association; in the second —very possibly, for the ancient Babylonians themselves represented the sun sometimes by an asterisk —it is necessary to *prove* that they wished to symbolize Astarte. We know, on the contrary, that the winged sun disk and its late equivalent, the Greek eagle, constituted one of the characteristics of the numismatics of Paphos in the Persian and Hellenistic epochs.

[4] Sometimes the sun disk seems to receive a second pair of horns as if to betray its association with the moon; but this fact is too isolated to be utilized.

[5] Besides, from the moment when the Syrio-Phœnician divinities assumed a more or less solar character, it would be very natural that one should connect with the representation of the star of day that of the star which is its nocturnal reflection.

the past century. Toward the beginning of our era at the latest most of the divine emblems in Phœnicia, as in Syria and elsewhere, preserved no more of their ancient symbolism than the decorative value which they had accumulated.

STELÆ FROM SAÏDA

Figure 2 reproduces 2 little stelæ sent in 1891 by M. Durighello of Saïda to the Royal Ottoman Museum. Their respective heights are 1 ft. $2\frac{1}{2}$ in. and 1 ft. 5 in. The region from which they came is Saïda and there is no doubt as to their authenticity. I have no further information.

Are they grave stelæ? Probably not. I believe rather that they decorated the façade of some little Phœnician temple of an early period, following a usage of which the temple of Sahîm has preserved a trace. The personages represented are young hierodules or even priests in adoration on both sides of a divine image or of the door of the sanctuary. It is also possible, if not probable, considering the difference of dimensions, that they belonged to 2 distinct groups. At any rate, these sculptures deserve to be published. As to their age, which does not seem to be much earlier than the Roman epoch, they take place immediately next to certain Phœnician monuments of Greek inspiration and style recently added to the museums of Europe.

P. S. Ronzevalle.

Beyrouth, Syria.

DEATH OF HARRY L. WILSON, Ph.D.

WE REGRET to note the death of Harry Langford Wilson, Ph.D., professor of Roman archæology and epigraphy in Johns Hopkins University. His death was very sudden and unexpected. He had gone to Pittsburgh on business and was there taken suddenly ill on February 21, with an attack of double pneumonia, dying February 22, 1913. Professor Wilson was born at Wilson, Canada, in 1867. He took his bachelor of arts degree at Queen's University, Kingston, Canada. In 1896 he was awarded the degree of doctor of philosophy. In 1893 he entered Johns Hopkins University as a graduate student in Latin, Sanskrit and Greek. In 1906 he was made professor of Roman archæology and epigraphy, and about the same time was elected professor of Latin at the American School of Classical Studies at Rome. At the last meeting of the Archæological Institute of America he was chosen their president.

Professor Wilson was a man of kindly spirit and broad interests. Beside his active work in archæology he took great interest in music and outdoor sports, canoeing being one of his favorite diversions. All who knew him will feel that they have lost not only a profound scholar but a fine type of man and a loyal friend.

SKULL OF SUSSEX MAN COMPARED WITH A HIGHLY DEVELOPED MODERN TYPE
Courtesy of *The Graphic*.

THE "SUSSEX MAN"

THE DISCOVERY of the skull associated with palæolithic implements in undisturbed gravels in Piltdown Common, Sussex, England, which was reported last December by Charles Dawson, F.S.A., has stirred up a great deal of newspaper speculation as to the age of this so-called "Missing Link." The rather hasty suppositions regarding the possibilities as to its age, position in the scale of human development and its bearing on the evolution of early man which have been launched by eminent scientists have been taken up in the papers and some popular magazines and stated as established "gospel truth." All this is very misleading for the uninitiated inasmuch as the estimates of the age of the gravels and the position which the skull occupies in the scale of human development vary greatly. The estimates giving the specimen the greatest antiquity having the advantage of making the better story for publication.

The first point to be decided is the age of the gravels in which the skull was found. When this is established then, and only then, can deductions be safely made as to her (it is probably a woman) position in the human scale, whether she is the or a "Missing Link," or a degenerate form of some earlier race, and also as to the relation of this skull to those found in Northern Europe.

Mr. Dawson describes the gravel deposits at Piltdown in which the skull was found as resting "upon a plateau 80 ft. above the River Ouse and at a distance of less than a mile to the north of the existing stream."

While we are not in position at present to pass judgment on the exact age of the gravel at Piltdown, yet it is well to call attention to the danger of over-estimating the length of time required for the formation of gravel deposits during the glacial period and their subsequent erosion when the rivers assumed their present proportions. Although the river Ouse is outside of the glaciated area of England, glacial conditions doubtless increased the rainfall and consequently the activity of the river during that time. A measuring stick based on the erosion done by a river today will give exaggerated estimates if applied to river deposits whose history extends into the glacial period. If, however, we take an estimate from rivers today, we find that it would be a very sluggish stream that would not lower its bed 4 ft. in 1000 years. At this rate the River Ouse would have cut down the 80 ft. mentioned above in 20,000 years. The height of the river terrace above the present stream would indicate that the estimate of the age of the gravels should be reduced from "several hundred thousand years—perhaps a million," as has been supposed by some popular writers, to somewhere between 25,000 and 50,000 years. In a later issue of RECORDS OF THE PAST we will give a fuller discussion of this subject.

Four years ago, while walking along the road passing from Lewes northward into the Weald, Mr. Charles Dawson[1] "saw that it had been mended by peculiar flints. These, he found, came from a pit situated in the corner of a field under a venerable yew-tree. A little later, on visiting the pit he found that laborers had dug out a 'thing like a cocoanut' and thrown the splinters on the rubbish heap near by. It was from this rubbish heap that the greater part of the skull was recovered, but the lower jaw was dug out of the undisturbed stratum at a later date."

The gravel in which it lay was composed of water worn fragments "of Wealden ironstone," sandstone, "occasional pebbles of chert . . . . and a considerable proportion of chalk-flints, which were also waterworn, all deeply stained with oxide of iron and most of them tabular in shape. The human skull was originally found by workmen, broken up by them, and most of the pieces thrown away on the spot. As many fragments as possible were recovered, and half of a human mandible was also obtained from a patch of undisturbed gravel close to the place where the skull occurred. Two broken pieces of the molar of a Pliocene type of elephant and a much-rolled cusp of a molar of a mastodon were also found besides teeth of a hippopotamus, the bones of a form of deer, of a fossil type of beaver and an extinct form of horse. Like the human skull and mandible all these fossils were well mineralized with oxide of iron. Many of the waterworn iron-stained flints closely resembled the 'eoliths' from the North Downs near Ightham. Mingled with them were found a few palæolithic implements of the characteristic Chellean type."

In spite of the associated implements of Chellean type Mr. Reid Moir concludes, it seems to us with slight justification, that in this skull we have one of the makers of the "eoliths." If, however, natural forces can produce fractures in flint so closely resembling the so-called artificially

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[1] The following facts and quotations are taken from the report of the discussion of this subject before the British Geological Society on December 18, 1912, as published in the *Antiquary* (London) for February, 1913.

made "eoliths," that they cannot be distinguished would not such a gravel deposit as this be a natural place to find an abundance of them? Mr. Moir neglects the evidence furnished by the Chellean implements and proceeds to congratulate Mr. Dawson for having discovered the remains of "the beings who made the Eolithic flint implements" so that we can now form an idea as to the appearance of "these immensely ancient people." He even concludes that this removes the last objection and settles the eolithic problem.

The fragments of the skull as now carefully fitted together show that it was very ape-like. The skull is very massive "with bony walls nearly ½ in. thick. The brain-containing part is fairly complete." "The face and the greater part of the forehead are missing, but fortunately half of the lower jaw with the first and second molar teeth *in situ* was recovered. The front part of the mandible which carries the incisor, canine and premolar teeth is also missing—but there is enough to show that in the region of the chin the conformation was identical with that of anthropoid apes. Not a single bone of the limbs or trunk was found."

Dr. Woodward contends that the skull exhibits "all the essential features of the genus *Homo* with a brain capacity of not less than 1,070 cc. (or 65.3 cu. in.) but possibly a little more." In order to compare this with the capacity of existing peoples we give the results of careful measurements by Dr. J. Bernard Davis. He found the mean internal capacity of European skulls to be 92.3 in., native Americans 87.5 in., Asiatics 87.1 in. and Australians 81.9 in. The accompanying illustration of the skull of a highly developed modern type superposed on the restoration of the Sussex skull, shows the differences at a glance.

To continue with Dr. Woodward's description of the skull he says: "The forehead was steeper than that of the Neanderthal type, with only a feeble brow-ridge; and the conformation of the occipital bone showed that the tentorium or covering over the cerebellum was on the level of the external occipital protuberance, as in modern man. Seen from behind the skull was remarkably low and broad, and the mastoid processes were relatively small. The horizontal ramus was slender and so far as preserved resembled in shape that of a young chimpanzee." The molars one and two are typically human although comparatively large. The two molars had been worn flat by mastication. From the weakness of the mandible and other features Dr. Woodward thinks the specimen to be that of a female.

Dr. Woodward is further reported as stating that the most significant thing about this discovery is that judging from the shape of the jaw "the creature when alive had not the power of speech." He admits that it had some brains and concludes that the brain developed first and speech later.

Such important statements and deductions cannot be accepted offhand and it is unfortunate that they have been given such publicity before a general formal discussion has taken place. This feature of the skull will be discussed before long in the Royal Society (British).

In honor of the discoverer of this specimen the name proposed for this "new species of *Homo*" is *Eoanthropus Dawsonii*.

FREDERICK BENNETT WRIGHT.

STONE AX WITH 35 FLUTES

This was found by C. E. Johnston at the southwest end of Wind Lake, Racine County, Wisconsin. It is now in Mr. Ringeisen's collection.

BIRD STONE OF GRANITE

This bird stone was found by Jos. Covey, 6 miles from Omro, Winnebago County, Wisconsin.

A WISCONSIN COLLECTION

IN WISCONSIN the collection of archæological material from aboriginal camp, village and burial sites, evidence of the existence of which is to be found on the banks of nearly every stream and lake, has now continued for nearly 70 years. During this period of time the assembling of collections of these articles has occupied the attention of many persons, and hundreds of small and a smaller number of large and important collections have thus been formed.

Of these collections a considerable number have in time been presented or sold to local museums, or educational institutions. Others are preserved in similar institutions in adjoining and distant states. Many more have been carried away to other states by their owners, or have been disposed of to some of the numerous dealers in Indian relics and by them scattered among their patrons in every section of the United States.

At the present time several hundred persons in Wisconsin are known to be actively engaged in the making of archæological collections. One of the largest and most interesting of these private collections is that owned by Mr. Joseph Ringeisen, Jr., a resident of the city of Milwaukee. For fully 15 years this gentleman has been devoting a large portion of his leisure time to the collection and study of material illustrative of the Indian stone art of his native state. His efforts in this direction have been so successful that his collection of implements, ornaments and ceremonial objects now contains thousands of specimens and is excelled in the variety and rarity of its contents by no other Wisconsin private collection of this particular character and perhaps by but few others in any state. Many of his choicest specimens are either not to be found, or are duplicated in but few of the great museum collections of our country. Mr. Ringeisen is an experienced judge of archæological materials and his collection represents a large outlay of time and money.

Illustrations of a few of the many choice specimens which he has been so fortunate as to acquire appear in connection with this article. In his

FLUTED STONE AX

This ax with 3 flutes on each side was found by Mrs. Minnie Warnke at Stillwater, Minnesota, on a sandy ridge near the State Penitentiary.

cabinet are chipped stone implements of every known Wisconsin and class type. These are carefully selected from among thousands of specimens which have passed through his hands. Many are of exceptional size and beauty. Of pecked and ground stone implements he has a large number. These range in size from diminutive examples to others of the largest size and weight. Included among them are 25 fine examples of the rare fluted or ornamented stone axes and celts, which are peculiar to this region. The number of finely fashioned specimens of grooved hammers and mauls, chisels, adzes and gouges is large. The largest adze in the collection measures 16 in. in length.

In stone ornaments and problematical stone objects the Ringeisen collection is particularly rich. For these its owner has always possessed a special fondness and has allowed but few opportunities of obtaining desirable specimens to escape him. Included in this division of his collections are large and well selected series of birdstones, bannerstones, boatstones,

GRANITE BIRD STONE FROM WINNEBAGO COUNTY, WISCONSIN

See page 69 for side view.

gorgets, tubes, pendants, beads, cones and hemispheres. In his search for birdstone ceremonials this collector has scoured the state. Thirty-five specimens, representing nearly every type known to the eastern United States are present in his cabinet. Many of these have been figured and described in *The Wisconsin Archeologist.* The largest specimen has the very exceptional length of 7 in.

Of the class of stone ornaments known as gorgets this collection contains nearly 200 specimens. Slate, steatite, catlinite and other stones were employed in their manufacture.

The bannerstone ceremonials are represented by 20 specimens. All are in perfect condition and selected for their rarity of form and beauty

SIDE, TOP AND BOTTOM VIEWS OF THE LARGEST BIRD STONE FROM WISCONSIN

This bird stone, 7 in. long, reddish brown in color, was found on the south shore of Lake Beulah, Walworth County, Wisconsin.

of workmanship and material. Two of the finest specimens are fashioned from the very attractive ferruginous quartz. Others are made of banded slate, granite, syenite and porphyritic rocks. There are 30 stone pipes, the siouan, micmac, disk, monitor, rectangular, ovoid, effigy and other classes of pipes being well represented.

If there is any class of chipped stone objects in which the Ringeisen collection excels any other private collection in the country it is in the number of so-called "caches," or hoards of blanks and knives which it contains. There are 9 of these caches. The largest, and one of the finest, consists of 123 blue hornstone disks, which were recovered some years since from an aboriginal site at Lexington, Indiana. Some of its specimens show traces of treatment with native red paint. A cache of 36 knives, of the same attractive material, comes from Aurora, in the same state.

CEREMONIAL AX OF ROSE QUARTZ
This was found by Randolph Schultz at Springfield, Marquette County, Wisconsin.

Of 3 other caches, of the same character as the preceding, one of 16 blades comes from Door county, Wisconsin, and 2 of 28 and 35 pieces respectively, from the state of Michigan.

Of the familiar notched blue hornstone knives, one of 12 pieces was procured in Illinois and another of 53 pieces was recovered at Fort Hill, in Ohio. No printed description can do full justice to the beauty of these series of aboriginal implements. They must be seen to be fully appreciated.

A cache of 20 knives, made of white and reddish chert, was also obtained in Michigan.

The owner of this very valuable collection is widely known for his hospitality. The contents of his cabinets have been inspected by prominent visiting archæologists from many states. To Wisconsin students, particularly, his collection has proven of the greatest value. Mr. Ringeisen has been for years an officer and patron of the Wisconsin Archeological Society, which has long been conducting systematic archæological surveys and explorations in his home state. It is to be hoped that this important collection may finally find a permanent home in one of the several large Wisconsin museums, where its presence may prove of public educational benefit, and remain a monument to its owner's long-continued interest in the advancement of American archæological history.

CHARLES E. BROWN.

Madison, Wisconsin.

FIG. 9. SCENES ON THE BANKS OF THE DANUBE, GUARDED BY ROMAN SENTINELS. COLUMN OF TRAJAN, ROME

ROMAN HISTORICAL RELIEFS

WHEN the Greeks celebrated their national victories in triumphal reliefs, they generally represented them in the guise of mythical or Homeric exploits. The pedimental groups of the temple of Aphaia on the island of Ægina portray episodes of the Trojan war. The fight of the Lapithæ with the centaurs at the wedding of Pirithous is depicted on the western pediment of the temple of Zeus at Olympia, and a similar scene is delineated on the western cella frieze of the Theseum at Athens. These sculptures all commemorate the glorious victories over the Persians in the V century B. C. Even as late as the time of the colossal Altar of Pergamon, built in the II century B.C. to celebrate the Pergamene victories over the Galatians, the grand relief on the podium represented the battle of gods and giants, some of whom have great serpents in place of legs and others are winged. The story of Telephus, the mythical founder of the city, was carved with epic fulness of detail on the inside of the wall surrounding the altar.

In exceptional cases, for example on the frieze of the little Temple of Athena Nike, built *ca.* 424 B. C., fights between real Greeks and Persians were portrayed. In some of the friezes of the Nereid and other Lycian monuments (*ca.* 400 B. C.) assaults on city walls, lines of prisoners, and other historic scenes were depicted.

The Romans, therefore, had a few precedents when they preferred the real to the ideal, historical events to mythical adventures. Imbued as they were with a spirit that was intensely national, with a pride that acknowledged no peer, they wished to enshrine their great national achievements in the creations of a true imperial art. They employed the Greek technique and forms to immortalize heroes still living or recently departed, to perpetuate events that did not belong to a misty past, but to the present, events that had occurred within the last few years and were distinctly remembered by all. As illustrations of Roman taste and style we may mention the battle between Romans and Macedonians represented on a monument which Æmilius Paulus erected in Delphi after his victory at Pydna in 167 B. C. (Fig. 1), the partly allegorical, but chiefly historic triumphal procession delineated on the Arch of Titus in the eighties A. D., and various scenes on the Arch of Septimius Severus in 203 A. D.

The national character determined the choice of subjects, and thereby influenced deeply the general conception and mode of execution of the reliefs. The living Augustus could not be portrayed on a relief with the same freedom as the mythical Theseus; Trajan's crossing of the Danube could not be depicted as occurring in space—as the procession on the cella frieze of the Parthenon was. Prosaic details had been introduced to a certain extent in Lycian monuments, the trappings of war and the patterns of costumes were represented on the mosaic of the Battle of Issus. The artists in Rome followed such models and chiseled with loving care the insignia of office, the implements of sacrifice, and the accoutrements of war. In the circumstantial narrative which they carved in stone they

resembled some of the masters of portraiture and modern painters. They displayed the modern characteristic in fine art which leads to narration and description—the art of illustration—at the sacrifice of great conceptions. Their splendid works were charged with meanings which necessitate patient study, and they often lack the perspicuity of Greek works.

In various reliefs, *e.g.*, those of the Altar of Augustan Peace and the Arch of Titus (Fig. 2) the Roman artists arranged their figures in the order of a procession—according to the model of the Parthenon cella frieze. But this arrangement is not suitable for the exterior decoration of a building, as processions should not be separated into two divisions advancing abreast.

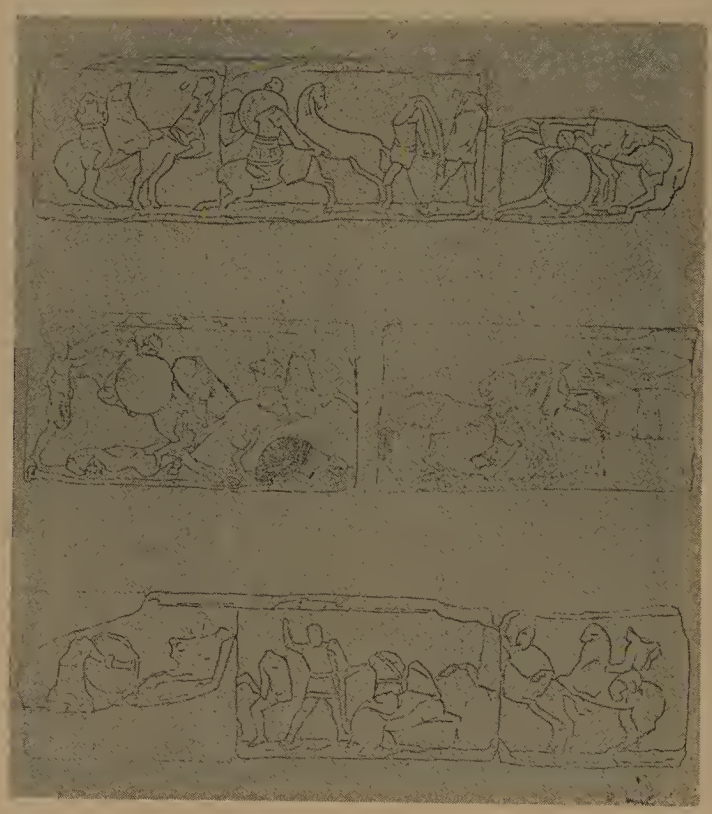

FIG. 1. ROMAN RELIEF AT DELPHI

Reinach, *Repertoire de Reliefs Grecs et Romains.*

Accordingly it was superseded by the group system, which was employed in the Constantine Medallions, on the arch at Beneventum, and elsewhere.

When the subject and the general composition of a relief had been decided, the problem of representing distance, locality, and background would arise. As early as the V century B. C. the painter Polygnotus wished to designate locality and placed figures on different levels in order to indicate that those in the lower part of a painting were close at hand and those higher up were farther away. Nevertheless he did not reduce the size of those in the distance and retained the neutral, or blank, background.[1] A similar arrangement is observed in the fragments of a wall painting of the III century B. C., found on the Esquiline Hill and now in the Palazzo dei Conservatori. It was employed also in the great frieze of Telephus at Pergamon, *ca.* 225 B. C.

[1] It is, in fact, a general characteristic of imperfect, as well as archaic art.

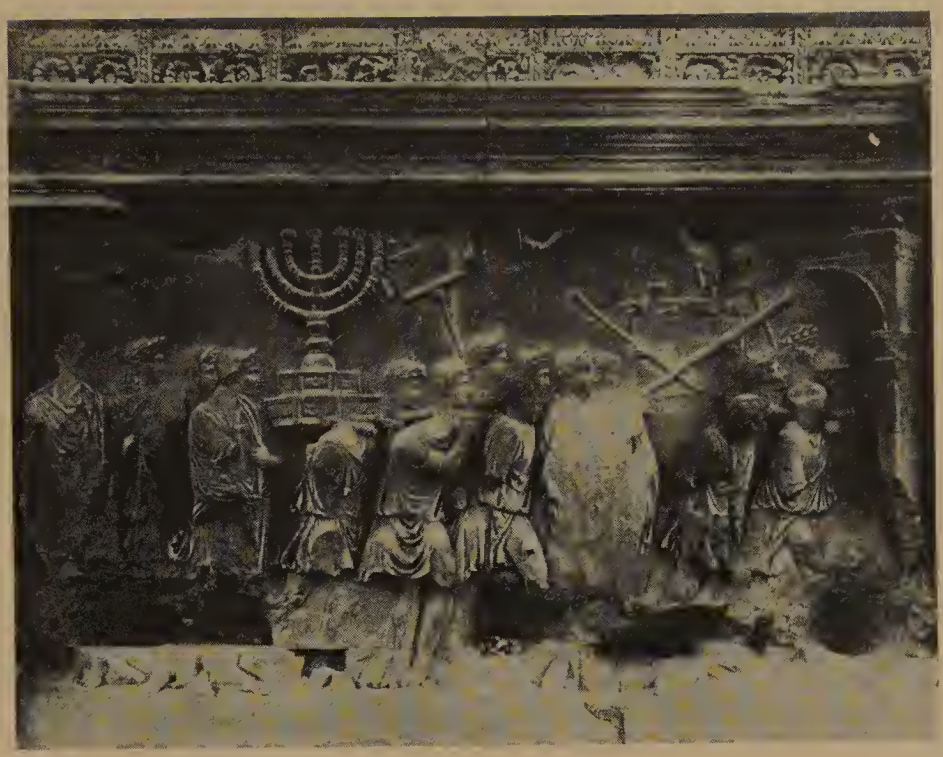

FIG. 2. RELIEF WITH SEVEN-BRANCHED CANDLESTICK ON THE ARCH OF TITUS

FIG. 3. RELIEF FROM THE ALTAR OF PEACE

Strong, *Roman Sculpture from Augustus to Constantine.*

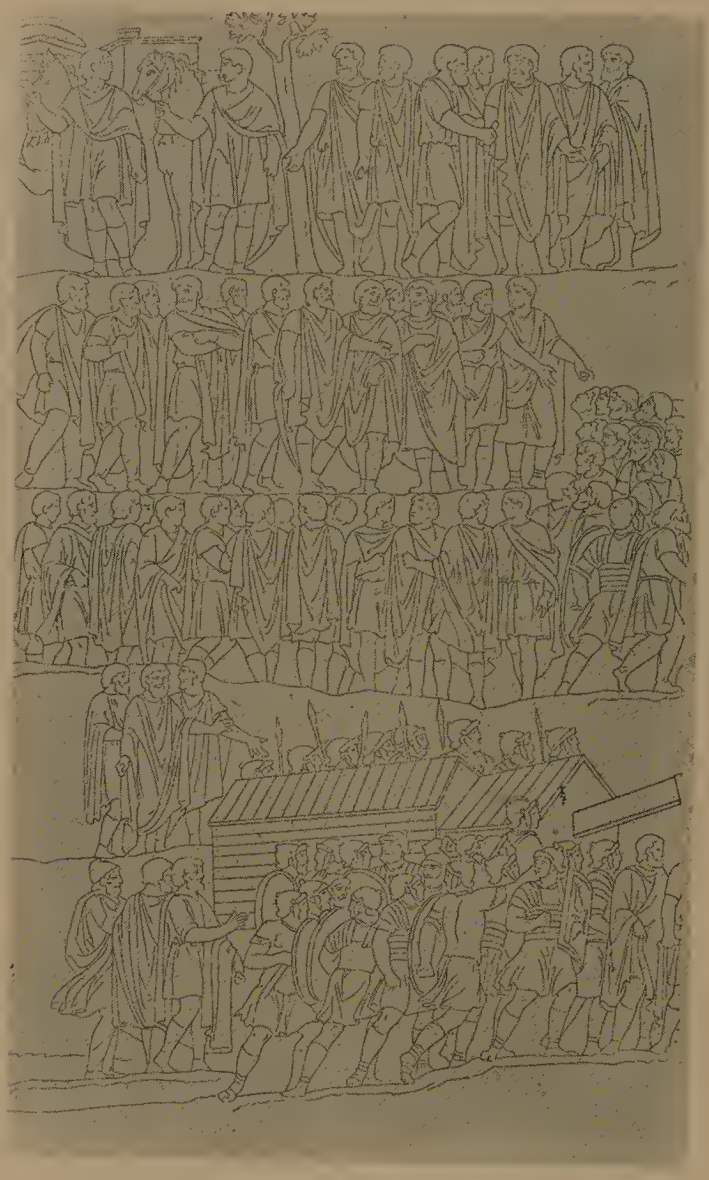

FIG. 4. RELIEF ON ARCH OF SEPTIMIUS SEVERUS

Reinach, *Repertoire de Reliefs Grecs et Romains.*

The Romans at first endeavored to represent distance by the depth of the relief. On the Altar of Augustan Peace those who were near by were modeled somewhat in the round; those farther off were carved in flat, or low, relief (Fig. 3). The climax in this style in antiquity was attained in the reliefs of the Arch of Titus. They reveal a subtle variation of depth from the rounded figures of the front plane to the flatly chiseled heads of those in the distance. They are marvelous in their realism, in the lifelike representation of continuous motion. When they were realistically painted, especially the background, and were not disfigured by lengthening shadows, the effect must have been even more excellent (Fig. 2). Greater and complete success in this line, in perspective, was impossible at that time, as the science of perspective was not developed till 1300 years later. Besides, deep reliefs are not appropriate for the exterior of a building, because they seem to impair its solidity. Purely superficial decoration is to be preferred.

Whatever the reason may have been, the Romans next adopted the primitive expedient of Polygnotus. To be sure, in relief, as in painting, the artist must to a certain degree use a vertical surface to represent a horizontal surface. Hence what is distant will usually be higher, even in the "Gate of Paradise" of Ghiberti; but the Roman sculptor employed this artistic license to excess, and has as a rule too high a horizon. He was more deficient in aërial than linear perspective.

The convention of having two or more tiers of figures, representing different distances, was employed very extensively on the column of Trajan, but reached perhaps its culmination in the reliefs of the Arch of Septimius Severus, where 4 tiers of persons are the rule and 5 are found in one scene (Fig. 4). It was made use of largely also for example in the reliefs of the column which the Emperor Theodosius erected in Constantinople after a victorious campaign in 386 A. D.

FIG. 5. BATTLE OF ROMANS AND BARBARIANS ON SARCOPHAGUS OF III CENTURY A.D.

Strong, *Roman Sculpture from Augustus to Constantine.*

The ancient artists struggled more or less successfully with another cognate problem in perspective—the representation of locality and background. Their progress is perhaps observed to the best advantage in vase-painting. Many Greek vase-painters of the V century B. C. produced admirable designs and were masterly in their drawing, but their idea of perspective was very primitive, and their landscapes were quite rudimentary. A few stones might signify a rocky locality, a rock stand for a mountain, a dolphin symbolize the sea, and a pillar represent a house or a temple. Progress was very slow, and the first complete background, or "self-contained landscape," seems to be found on the Ficoronian Cista *ca.* 225 B. C.

The development of relief sculpture corresponded in a general way with that of painting, including vase-painting. The procession of the

FIG. 6. ACHILLES AT THE COURT OF LYCOMEDES. ON SARCOPHAGUS OF TIME OF ALEXANDER SEVERUS

Parthenon frieze moves in space, the true Athenian background being wholly ignored. In some of the reliefs at Trysa-Gjölbaschi *ca.* 400 B. C. a rock and a goat represent a mountain, a line of fish indicates the sea, and the like. The earliest reliefs with a complete, but sketchy, background seem to be the series of Telephus on the Pergamene altar wall. The landscape is, however, still ideal, not specific and real. In both painting and sculpture the idea of this complete background may have been derived from scene-painting in the theaters.

The Roman artists employed in general two methods of dealing with the background. In most of the reliefs of the Altar of Augustan Peace the composition is crowded and the heads of the persons in the procession are arranged on the isocephalic principle and reach almost or quite to the top of the reliefs. Accordingly no background remains. This style was adopted in many Trajanic reliefs, and was very natural, when the Polygnotan convention, or hillside perspective, was employed. It was a favorite method on sarcophagi, for example the one representing Achilles and Penthesileia, or the most involved composition of all (ca. 300 A. D.), which depicts a battle of Romans and barbarians, and is now in the Museo delle Terme (Fig. 5).

In a modification of this style the composition is more open, leaving spaces between the figures, for instance in the beautiful relief of Achilles at the Court of Lycomedes (Fig. 6) and in some of the Constantinian sculptures. The intervening spaces are deeply undercut in order to break up the surface into complementary parts of high lights and deep shadow.

FIG. 7. TERRA MATER. FROM THE ALTAR OF PEACE

The result is that the figures, though carved in high relief, seem to be flat, because of the absence of a proper background.

The second, and specifically Roman, method was to represent the actual locality where an action had taken place. In the allegorical relief with *Terra Mater*, now in the Uffizi, there is a realistic foreground: a meadow with trees and flowers, in which a cow is peacefully reposing and a sheep is nibbling the grass (Fig. 7). In another relief belonging perhaps to a monument of Claudius and now in the Villa Medici there is a representation of a bullock led to sacrifice, and the background is formed in part by a temple. . A similar relief perhaps Domitianic and at present in the Uffizi has a complete background of buildings (Fig. 8). It is interesting also because Raphael made use of it for his cartoon of Paul and Barnabas at Lystra. Such an architectural setting was natural and proper in the presentation of scenes that had occurred for example in the Forum Romanum. Perhaps the reliefs from the balustrades of the Rostra, the *Anaglypha Traiani*, are the best known illustrations of this convention, which was employed extensively and continued down to the end of the IV century

FIG. 8. SACRIFICE OF A BULL

Strong, *Roman Sculpture from Augustus to Constantine.*

A. D., for instance in the Congiarium on the Arch of Constantine and some of the panels on the column of Theodosius.

Perhaps the method was popular, because it was easy. Roman artists were fairly successful in linear perspective, and they manipulated the architecture at discretion. The artistic conventions may be illustrated by means of the reliefs on the Column of Trajan, in which the climax was attained in localization and the representation of background. As the historic events, the drama of the destruction of the Dacian nation, formed

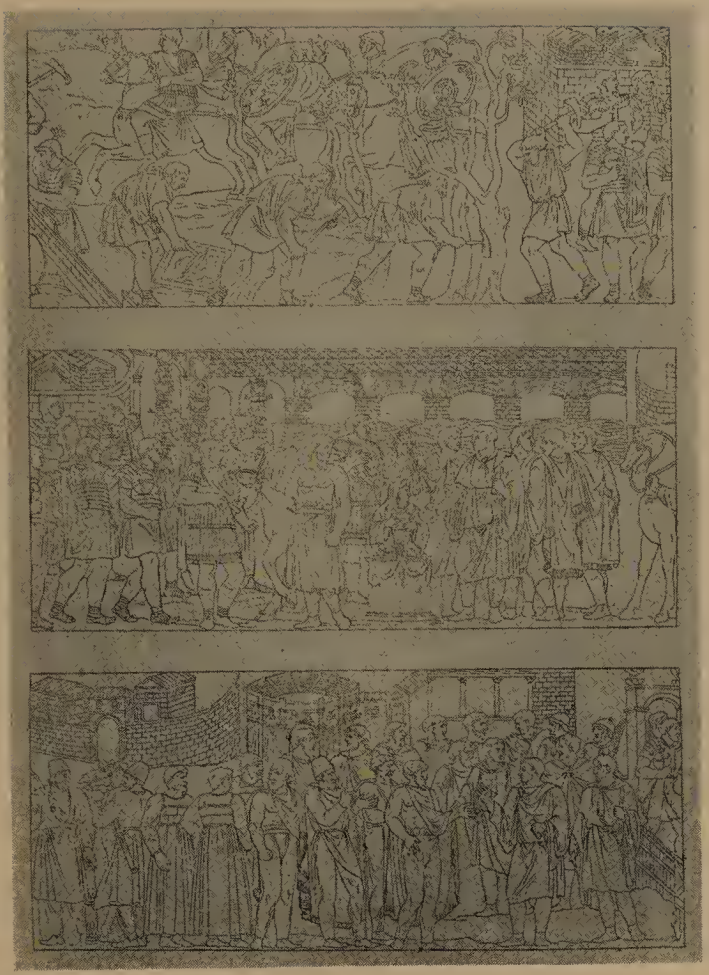

FIG. 10. (1) TRAJAN AT THE HEAD OF A CAVALRY CHARGE; (2) TRAJAN OFFERS A SACRIFICE; (3) TRAJAN RECEIVES THE SUBMISSION OF NATIVE CHIEFS

Reinach, *Repertoire de Reliefs Grecs et Romains.*

FIG. 11. TRAJAN OFFERS A SACRIFICE. COLUMN OF TRAJAN

the center of interest, and the locality and landscape were depicted simply to make the scenes intelligible and real, the figures of the soldiers were magnified out of all proportion to their relative size. They stalk along like Gullivers in a Lilliputian land. A man may be as tall as a building 50–75 ft. high, a few men fill a large fortification and represent an army of thousands. A few stunted trees constitute a forest. Two or three buildings stand for a village or town (Fig. 9). The figures are regularly seen from the horizontal point of view, but the buildings, without roofs, are frequently tilted forward *ca.* 45 degrees in order to exhibit the persons and action in the interior. The pedagogic instinct prevailed over the artistic. The sculptors have given us pictorial settings of astonishing completeness, realism, and variety. In this moving picture display we see fortified towns, stockades, bridges of boats, tribunals, innumerable fortifications, tents, rivers, cities, arches, forests, a grand bridge across the Danube, an amphitheater (Fig. 10), a harvest field, hills, ridges, and a wilderness with elk, boar, and wild cattle.

Such was the climax of Roman achievement in this line, and it remained unsurpassed for a thousand years—until the time of the Italian Renaissance.

JOHN E. GRANRUD.
University of Minnesota.

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GANDHARA RELIEF REPRESENTING THE STORY OF KING SIVI[1]

IN THE British Museum there is a steatite relief from the Swāt valley in northwestern India which is of special interest because of its high artistic quality and also on account of the story it depicts. The sculpture belongs to the best class of Gandhāra workmanship and the expression of pathos in the woman attending the king is remarkable for Oriental art.

On the left, on a throne under a canopy, is seated a king; his eyes are half closed, his features drawn with pain, and his head droops forward as if he were about to faint. His left hand rests on the shoulders of a woman, who leans towards him with one arm outstretched in a gesture of tender solicitude, and whose whole attitude reflects the pity and grief shown upon her features. Before the royal footstool kneels a man with a knife who is engaged in cutting off a portion of flesh from the king's left leg; and behind him, to the right, stands a well-executed figure of a man holding a bismar. Immediately to the right of the last is a dignified individual holding a *vajra*, and distinguished by a headdress of peculiar shape and a nimbus; this figure is easily recognisable as Indra (the Sakka of the Jātaka). The sixth figure is also furnished with a nimbus and is perhaps some divine attendant upon Indra. Finally, close by the leg of the king's throne is a pigeon, while the space between the heads of the balance-holder and the female figure respectively is occupied by the mutilated figure of what must have been a flying bird.

[1] Condensed from an article by Messrs. M. Longworth Dames and T. A. Joyce, in *Man* (London) for February, 1913.

The subject is evidently taken from the story of King Ṣivi which is told in the *Mahābhārata*, book III, chapter 197. One day the Celestials resolved to test the virtue of King Ṣivi; accordingly Agni assumed the shape of a pigeon, and fled before Indra, who pursued him in the form of a hawk. The pigeon took refuge in the lap of the king, who is mentioned as being seated upon a costly seat, and begged for protection, enforcing his claim by the statement that it was a *Rishi*, learned in the *Veda*, and of blameless life, who had taken the form of a bird. The demand of the hawk is couched in fewer words. "O king, it is not proper for you to interfere with my food by protecting this pigeon!" The answer of the king is given at length, and consists chiefly of an enumeration of the penalties which the Celestials inflict upon him "who gives up a frightened creature seeking protection from its enemies." Finally he offers the hawk a bull cooked with rice in place of the pigeon. The hawk replies: "O king, I do not ask for a bull or any other meat more than what is in this pigeon. He is my food today ordained by the gods. Therefore give him up to me." The king still refuses, and offers to do whatever the hawk bids him as a ransom for the pigeon. The hawk then demands a piece of flesh from the king's leg equal in weight to his quarry. Ṣivi cuts off a piece from his right leg, but the pigeon proves the heavier; he cuts off piece after piece from other portions of his body, but without result, until, finally, he gets bodily into the scale. Upon this the hawk disappears, and the pigeon revealing himself as Agni, praises the king and promises various rewards for his virtue.

This evidently is the story pictured on the relief, which thus possesses the additional interest of being, apparently, the only known Gandhāra representation of this legend.

The story of Ṣivi is undoubtedly of early origin; the king's offer to kill a bull as ransom for the pigeon would seem to relate it to pre-Buddhist Hinduism and it must have been adopted by the Buddhists, who saw in King Ṣivi a previous incarnation of the Buddha.

The story must have been a well known Jātaka, but does not appear in the collection translated in the Cambridge *Jātaka* by Cowell and Rouse from the text edited by Fausböll. No. 499 in that series bears the title of Ṣivi-Jātaka and refers to the self-sacrifice of the same King Ṣivi, who gave his eyes to a blind Brahman and expresses also his willingness to give his flesh if required. It appears to be of great antiquity, for it is the second in the list of 34 original Jātakas mentioned by Tāranātha and alluded to by Hēmachandra. The same King Ṣivi plays a part in other Jātakas, and his grandson is the hero of the Viṣvantara or Vessantara Jātaka which often figures in Buddhist art.

The Chinese pilgrim Hiouen Thsang in the VII century travelled through Udyāna, that is the modern Swāt, and there found a stūpa built by King Asoka to commemorate the rescue of a pigeon from a hawk by the Bodhisattva, who, as King Ṣivika, cut flesh from his body to take the place of the pigeon. . . . . It seems probable that the stūpa from which this relief comes may be that visited by the Chinese pilgrim and its discovery may perhaps in the near future be effected by the Archæological Survey of the Frontier Circle, now under the direction of Sir Aurel Stein.

The story, it will be seen, was localised in Udyāna, nevertheless it is quite possible that the original country of Ṣivi (which apparently gave its name to the king) was really situated elsewhere, and one is tempted to suggest its identity with the modern Sibi or Sēvi at the foot of the Bolān Pass, and with the block of mountainous country between the Indus and the Bolān, which was known till modern times as Sivistān. At the foot of the mountain wall, where the plateau country falls towards the Indus, is the celebrated shrine of Sakhī Sarwar, now a Musalmān saint, but venerated also by Hindus. The shrine is associated with the veneration of 'Ali, and many of the stories told of him are of a markedly Buddhist type. The founder was a blind beggar to whom 'Ali presented a whole string of camels because the bread for which he asked was packed in a bale on one of the camels near the center. This strongly resembled the Vessantara or Viṿvantara Jātaka. But still more remarkable is the survival of the story of the hawk and pigeon. I took it down in Balochi verse in 1884. . . . . It is as follows:

A hawk and a harmless pigeon struggling together fell into the King's lap, and the hawk first prayed for his help, saying, "Hail to thee, 'Ali, King of Men, thou art certaintly the lord of our faith. I left my hungry brood on the bank of the Seven Streams on a deep-rooted tree, and have come swooping round that I may find somewhere some kind of game to take to my ravenous young ones. Thou knowest all; take not from me what I have hunted and caught." Then the pigeon made his petition. "Hail to thee, 'Ali, King of Men, thou art the guardian of our faith. This is my tale: I left my hungry little ones on the slopes of Mount Bambor, and came here to pick up some grains of corn to carry to my starving children. I have been seized by this cruel hawk who has taken me to tear me open. Now give me not to this ravenous hawk, for thou knowest all that has happened."

He called his slave and said, "Kambar, bring me my knife." He laid his hand upon his thigh. "Come, hawk, I will give thee some flesh." Then he cut out as much of his own flesh as was equal to the weight of the pigeon, and even a little more. The harmless pigeon began to weep, "He is not a hawk, nor am I a pigeon; we are both angels of God whom he has sent to try thee, and well has thou endured the test."

This story is identical with that preserved in the Mahābhārata, although perhaps the simplicity of the modern Baloch bard is more effective than the spun-out disquisitions of the classical poet. In the Amarāwati sculpture two or three episodes in the story are represented, the pigeon in one is seen fluttering into the king's lap, and in another he is cutting his thigh with his sword. In the last tableau the two appear in human form before the king, and it would seem that in the Jātaka version both the hawk and the pigeon resumed their original forms, and not only one of them as in the Mahābhārata form of the story. So also in the Balochi poem both are declared to be angels sent to test the saint.

The story then, originally Hindu, is seen to have been adopted first by the Buddhists and then by the Mohammedans. Is it possible that it went further, and, after being carried, like so many other Oriental legends, to Europe, furnished the root idea for *The Merchant of Venice?*

M. Longworth Dames,
T. A. Joyce.

A CAYUGA MEMORIAL

CHIEF LOGAN, whose history has been related recently by Prof. G. F. Wright, in an article on the "Logan Elm," is said by Dr. W. M. Beauchamp to have been incorrectly named Tahgahjute by Brantz Mayer—this really being the name of Togahaju, another Cayuga chief, living in 1766. Logan's real name, Sojechtowa, is similar to Sagoyewatha, a frequent Cayuga name, and one borne by the Seneca Red Jacket's father, who is thought to have been a member of the Cayuga tribe. Logan's father, known to the English by his Delaware name in Pennsylvania—Shikellimy—was, among his native (or adopted) tribe of the Oneida, called Swatane or Unq-qua-te-rugh-i-at-he. He married a Cayuga woman, whose nationality was inherited by her children. The XVIII century records are so obscure that Thachnechtoris, or John Sicalimy, often is confused in title with both his younger brothers, James (or John) Logan and John Petty. Logan, the lame, deserted and infuriated chieftain, died at Detroit in 1780, murdered it is said by a distant relative, at the age of 55.

In a quaint old book on *Fort Hill Cemetery*, mainly written by Judge Benjamin F. Hall, one of its first trustees, Logan's wife is stated to have been Alvaretta, daughter of Ontonegea, a Cayuga chief. In 1842, Jehoiakim, a Cayuga Indian from Cayuga Village, said that Alvaretta was born at Osco, now Auburn, and on the death of her father was adopted into Shikellimy's family. In babyhood her father took her with him on an important errand to Fort Orange, and her name was bestowed by an English officer. She was very beautiful, and died in the prime of life. She married Logan at Shamokin, the ceremony being performed by Bishop Ziesberger. While living in the Ohio Valley in 1774, she was one spring day crossing the Kanawha River with a boatload of women and children, when they were shot down in cold blood and killed by Colonel Michael Cresap. There must have been a second wife, for Logan is said to have left a Shawnee widow.

Logan's oratory, quoted by Professor Wright, made a deep impression at the time of its delivery, throughout the early American states, and the Indian troubles provoked by the land companies in central New York made his words frequently quoted. In 1846 many Cayuga went westward with Dr. A. Hogeboom, who seems to have acted in combination with the Ogden Land Company, who claimed the preëmption of Seneca territory. It proved exceedingly disastrous to those of the Six Nations who followed the persuasive agent to Kansas and Indian Territory.

By this time the head chief of the Cayuga was Wa-wa-o-wa-na-onk, or Dr. Peter Wilson, and he saved the remnant of his tribe from their self-destructive course, and brought them back to New York. At the time a popular attempt was made in Auburn, New York, to have the site of the old Cayuga fortress on a hill overlooking the town made into a reservation. The attempt failed and the Cayuga lost their tribal identity among the Seneca. The attractive country once marked by Indian warfare in their

struggle for existence, was transformed into a white men's cemetery, named "Fort Hill." This was done, possibly, with some thought of the hideous massacre of white colonists in the valley of the Wyoming, Pennsylvania, in 1776, barely 70 years before, in which both Cayuga and Seneca tribesmen took prominent part. To this was due much popular prejudice against the Cayuga, which does not seem to have affected the Seneca so much, who were a larger and more powerful tribe. The Seneca were protected by the forests of western New York from the utter destruction which overcame the Cayuga at the time of the revolution, living as the latter did in a broad beautiful open country, easy of access, between Owasco and Cayuga lakes. The supposed date of the foundation of Osco by the Cayuga Nation is 1310 and it was abandoned by them as a place of habitation in 1789.

But so many native-born archæologists in Auburn were interested in their Cayuga site that a public subscription was raised, through the efforts of several prominent men, among whom was my grandfather Judge Benjamin Franklin Hall. He was an enthusiastic student of Indian lore, and at the excavation of an aboriginal graveyard in one portion of Auburn in 1874, described it for the daily press, and incidentally mentioned having found on that site nearly 40 years before—that is, possibly in 1835—a copper hatchet, by which token he connected the defensive mounds of the Cayugan Iroquois on Owasco lake near Auburn, and other neighboring sites, with the remains of the "Mound Builders" in the Ohio valley. He believed that the builders of these mounds in New York might be different from the Iroquois, rather than the view held by some that the Ohio "Mound Builders" are a related stock. This copper hatchet he had long before sent to the Smithsonian Institution. He was one of the founders and first vice-presidents of the Cayuga County Historical Society, organized in 1876.

The monument raised in 1852 to the memory of the heroic Cayuga tribe was an obelisk of rough-hewn native limestone, on one face displaying near the base a white marble block with the inscription, Chief Logan's famous words, "Who is there to mourn for Logan?" The circular fortress, described by E. G. Squier on pages 48–52, of his *Antiquities of the State of New York*, has utterly disappeared, and the green glens and feathery hills dotted with white headstones remind one of the early pathetic tales of pioneer isolation and brave struggles toward the civilization left beyond the mountainous waves of the Atlantic. Nothing but this single shaft of stone speaks mutely for the red race of men, who struggled equally bravely with the sternnesses of nature, and faced the hazards of death without the hope of a memorial to describe their courage, their heart-deep emotions, their human joys and tremendous wars.

Dr. Peter Wilson's famous speech—that remained undelivered, although intended for the Land Board in 1846, and was read aloud years after his death, to the listeners at the great Indian inquiry of 1889—dilates in these terms on the past:

> The Cayugas then stood foremost in sagacity, wisdom and eloquence, and rendered great service in the councils of the great confederacy; nor were they excelled in philanthropy, patriotism or bravery. These great and noble qualities of a natural char-

LOGAN MEMORIAL SHAFT, AUBURN, N. Y.

acter, so highly honorable, were still in their glory down to the time of the great Cayuga chief, Logan. Your history, upon the death of this great man—warrior, legislator and diplomatist—would make him the last of the Cayugas; but I trust the last of the Cayugas is not as yet. . . . . I am a Cayuga; I was born a Cayuga. The Great Spirit, by his inscrutable providence, has called to himself the old men, the fathers of our nation, and we, the survivors, are left with no person of age and experience to guide us in our footsteps and council us in our difficulties. By the direction of the Great Spirit he has deemed proper to place one of the least of the Cayuga to oversee the affairs of his Cayuga people; and I shall always endeavor to perform the duties incumbent upon me, to the best of my abilities. . . . .

This alone renders the Cayugas miserable and unhappy. They are now destitute and weak and can not redress their wrongs. They appeal to the State of New York for protection. We have stood by you and fought your battles, and many of our warriors gave up their spirits to the Great Father, who made us all, in your defense. We have been faithful to you; not a pledge has been violated, not a promise has been broken. We now desire that you keep your pledge inviolate; that you extend the protection you promised to our fathers, which you said was made for us, their children. . . . .

We desired to live among you and die upon the very soil that gave us origin; a few more days are left us and we shall be no more; be just with us; give us the small annuity you have promised; doom us not to extermination, but save us from destruction; and when we are gone to the land of our fathers, our spirits may not return to molest your peaceful slumbers. You will mourn our loss, but will be happy in the consciousness that you have discharged your duty to your God and to your red brethren. But, gentlemen, if you determine to take from us our small annuity and give it to a foreign people, I would make this one request, that if perchance, hereafter an Indian shall call at your door for bread, do not, I beg of you in the name of the Great Spirit, do not ask to what tribe he belongs, but relieve his necessities and save him from starvation, for he may answer you: "I am a Cayuga." Then, oh, the pangs! the remorse you will feel when you behold him, whom you have deprived of his all, thus reduced to destitution and misery.

GRACE ELLIS TAFT.

New York City.

THE GREATER CEMETERY AT ROME

IT WAS the ancient pilgrims of the V century who first gave the above name to this catacomb, or rather underground cemetery, to distinguish it from the neighboring and smaller one of St. Agnes under the Basilica bearing her name; yet not many years ago it was known as the *Ostrianum*, and was confounded with that of St. Agnes with which it had been placed in communication some 25 years ago by a small aperture in a sand gallery.

Of the several feasts that the *Collegium Cultures Martyrum* celebrate in the dozen catacombs that can be visited by the public in the surroundings of Rome, this is one of the most frequented, as it is within easy distance of the city, and the tram passes just before the Vigna Leopardi where the entrance of this catacomb is to be found, some 300 yards beyond the Basilica of St. Agnes.

The ancient itineraries of the devout pilgrims clearly state that St. Emerenziana was not buried with her sister the renowned Virgin and Martyr Agnes in the catacomb which bears her name and where in the IV century Constantine the Great erected a Basilica, but a little further on "in another Basilica" which stood over this catacomb, and a mutilated inscription found here in 1884 says *XVI Kal. Octob. Marturorum in cimiteru Maiori Victoris Felicis Emerentianetis et Alexandri.*

The learned historian and Knight of Malta, Antony Bosio, who died in 1629 and was known by the by-name of "Columbus of the Catacombs" describes many things in this catacomb which have since disappeared.

Mgr. Crostarosa, the proprietor of the villa and grounds above this spot, a learned and patient fellow worker of De Rossi, excavated and cleared out many galleries and crypts hoping to find the Cattedra of St. Peter mentioned by Bosio and others.

The careful labor of this worthy ecclesiastic brought once more to light several liturgical chapels, but the several, perhaps Episcopal, seats cut in the tufa and found down here were simply made use of by the officiating priest whilst celebrating in one or other of these liturgical chapels, as proved by the works of Marucchi and of others.

The ancient acts of the martyrs tell us how St. Emerenziana suffered martyrdom for her faith whilst praying at the tomb of her sister.

According to the above mentioned acts the remains of this saint were removed later on to a basilica above ground which probably existed right above this chapel, but of which as yet no traces have been discovered.

On leaving this chapel, in a gallery near it there is a most interesting IV century fresco on the inner and semicircular wall of an arched tomb. The small figure of Our Lord, who has what looks like a scroll on His knees, is seated between the Apostles Peter and Paul, whilst on each side can be seen two open boxes containing scrolls. The Apostles are represented as advocates of the deceased person whose fresco is to be seen to the right of this arch, whilst in the center there is the Good Shepherd and at the other extremity of the same arch, there is a man with a small cart drawn by two beasts of burden, which is probably a second representation of the deceased who is transporting something from his vineyard.

On reaching a staircase and turning to the right, there is a small group of sepulchral chambers finely adorned with frescoes. In one of them Our Lord, surrounded by 6 of His Apostles, is in the act of blessing loaves and fishes.

The most interesting scenes painted in the next tomb are to be found on the ceiling, where are depicted the miraculous changing of water into wine at the marriage feast of Cana, and the multiplication of loaves in the desert.

Above the entrance of one of the tombs is painted a horse, a rare and almost unique emblem of the race of this life which has been happily run.

Another arched tomb in one of these chambers contains frescoes of the utmost importance regarding the parable of the wise and foolish virgins. These last, who are 5 in number, stand to the left and are bearing in one hand a light, whilst with the other, they are holding oil recepticles; they

look as if they wished to go towards the 5 wise virgins, who are to the right of the fresco, and are already taking part in the heavenly banquet. The figure of the deceased, who was most probably buried here, stands in the center with arms extended as in prayer and below it is the word *Victoria*.

A long corridor leads to a IV century sepulchral chamber where, on the inner and semicircular wall of an arched tomb, there is the finest representation of Our Lady yet found in the catacombs, and in which can be noticed the partial transition from the primitive style to the Byzantine.

On each side of this half figure of Our Lady there is the monogram of Christ. The head of the B. V. M. is covered by a veil which falls on and in part covers her shoulders; her neck is adorned with a string of pearls, and she is clothed in a *dalmatica*, a kind of kimono, which seems to have been yellow, with purple stripes from what little color still remains. Our Lady's arms which are covered by the broad sleeves of the kimono are half outstretched and her hands are extended in the attitude of a person in prayer. Before her there must have been also the half figure of her Son, but now there remains only the head and right shoulder. The full features of the Mother as well as of the Child are most regular, and both of them are looking towards the entrance.

On the arch of this tomb there is the painted bust of Our Lord and the figures on each side are those of a man and woman, which probably represent the deceased couple who were buried here during the IV century.

This catacomb contains several other symbolical frescoes, but they resemble more or less those already described in other accounts.

THOMAS B. ENGLEFIELD.

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PITHECANTHROPUS ERECTUS

Pithecanthropus erectus, DuBois. *a*,The skull cap seen from above; *b*, in profile; *c*, in sagittal section; *d*, *e*, the first found molar tooth, seen from the side and from above; *f*, *g*, the femur, seen from in front and in profile. (After Dubois, × 1–6, except *d*, *e*, which are × 1–3.) (From Sollas's *Ancient Hunters*.) (By courtesy of Macmillan and Company.)

THE AGE OF PITHECANTHROPUS ERECTUS

PITHECANTHROPUS ERECTUS is the name given to the species supposed to be represented in portions of a skeleton discovered by Dr. Dubois in central Java in 1894. The specimens consisted of two teeth, found at different times a few yards from each other, the top part of a skull found about a yard from one of the teeth, and a femur found about 15 yards distant. These were all obtained at different times, in volcanic tufa on the bank of the Bengawan, near Trinil. The cranium is remarkable for its small brain capacity. The later measurements by Dr. Dubois give it a capacity of only 850 cc.; but admittedly this is only an approximate estimate owing to the incompleteness of the skull. Skulls of certain inhabitants of New Britain at the present time, however, are known to contain only 860 cc. The tooth might do for a gorilla, but the femur is long and straight and entirely human.

Dubois and some other naturalists regarded this as a connecting link between man and apes, but other comparative anatomists like Cope and Lydekker pronounce it entirely human. At first the strata in which these relics were found were inferred to be Tertiary. This inference has now, however, been proved to be incorrect. Two expeditions, one in 1906 and the other in 1908, have made extensive excavations at Trinil in Java and brought back large collections of fossil plants together with fresh water shells and water worn bones. Of the 54 species of fossil plants none are now

extinct. Professor Shuster of Munich concludes that this flora is of Pleistocene and not Pliocene age—a conclusion which Prof. Edward W. Berry of Johns Hopkins University emphatically endorses (see *Science*, March 14, 1913), in the following language, "There can be no question of the correctness of this conclusion, since all the forms are still existing, while in the upper Pliocene flora of Mogi described by Nathorst from this same general region 40 per cent of the species are extinct. Moreover none of the Pliocene plants described by Crié from Java are present in the present collection."

This seems to settle the geological horizon of the strata in which *Pithecanthropus erectus* is found, and to correlate him in age with the remains of man found in deposits of glacial age in Europe and America.

GEORGE FREDERICK WRIGHT.

Oberlin, Ohio.

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BOOK REVIEWS

GREEK REFINEMENTS[1]

WE ARE all familiar with the statement that nature abhors straight lines, but few of us realize that the indefinable beauty of many of the Greek temples lies in the application of this rule by their architects. The curves are very slight, in fact so small that the eye does not perceive the curve but only the effect. Heretofore the literature on this subject has been limited to a few early works by Penrose (1851) and Pennethorne (1878) and some scattering periodical literature. So William H. Goodyear's magnificent volume on *Greek Refinements* will be welcomed not only by architects and students of art, but by the general public, for the subject is treated in a fascinatingly popular manner, the more technical points being relegated to appendices which follow each chapter.

The prevalent idea that "correct architecture" necessitated geometrical regularity and mathematical accuracy blinded our eyes to the curves in the Parthenon and other buildings and the irregularities were considered mistakes and mason's errors. But we find that the masons were very accurate, the difference in the ends of the Parthenon being $\frac{1}{4}$ in.

"For these reasons the discovery of purposed deflections from straight lines, and of other purposed departures from strictly symmetrical arrangements, in the Greek temples was a great surprise to modern antiquarians and to modern architects. The distinguished German antiquarian Bötticher (1806–89) attempted to discredit the curvatures as an intentional refinement by the theory that they were due to settlement at the angles. His theory was decisively overthrown by an examination of the Parthenon foundations which was made by Ziller. The foundation curve of the front of the temple at Corinth was *also subsequently shown by Dörpfeld to have been cut into the solid rock*" (p. 14).

Mr. Goodyear contends that the horizontal curvature in the Parthenon was not intended to overcome an optical illusion of sagging in the long line of the roof, for the actual optical illusion is the reverse of sagging. Nor does he think that it was intended to exaggerate the optical illusion and thus increase the apparent length of the building. He concludes:

"It will appear from these opinions that the classic horizontal curvatures were temperamental refinements inspired by the sentiment of beauty and by artistic preference, and not by a desire to exaggerate by optical correction the formalism, stiffness and rigidity of straight lines. It will also appear that the highest authorities on the general history of art had formed these opinions during the earlier stages of modern discoveries of

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[1] *Greek Refinements: Studies in Temperamental Architecture.* By William Henry Goodyear, Curator of Fine Arts, Brooklyn Museum. Royal quarto, $8\frac{5}{8}$ x 12 in. Pp. xviii, 227, 119 illustrations, 38 of them full page plates. Postpaid, $10.50. New Haven: The Yale University Press. 1912.

the Greek refinements, and long before the evidence had been accumulated which has been cited in this chapter, to the effect that the Greek curves were not intended to make the architectural lines look straight" (p. 68).

The following outline of the chapters indicates Mr. Goodyear's method of treating the subject:

Chapter I: the modern discoveries—of the entasis (not observed in Greek temples until 1810), of the curvature of the horizontal lines (unknown until 1837), of the columnar inclinations (unknown until 1829), of the other vertical inclinations and asymmetric dimensions and measurements (unknown until 1851).

Chapter II: erroneous explanations of the horizontal curvature as designed to correct an optical illusion of downward sagging, with a full account of the various theories which have been announced on this subject and of their inaccuracies and limitations.

Chapter III: the horizontal curvatures considered as æsthetic refinements, with quotations from the leading modern art historians, showing their unanimity in this point of view for the horizontal curvature as well as for the entasis.

Chapter IV: temples with and without horizontal curvature, gaps in the record, recent observations. This chapter contains a specific enumeration of all the extant ruins of the mother country and of the Western Colonies with reference to the presence or absence of the horizontal curvature and other refinements.

Chapter V: explanations of the horizontal curvature as designed for perspective illusion and vertical inclinations in Greek temples. This chapter considers the interesting theories of Hoffer and Hauck on the subject of perspective illusion and gives the reasons for adhering, in general, to the explanations offered in Chapter III; it also contains a circumstantial account of the matter of fact relating to the vertical inclinations of the columns and temple surfaces and of the explanations relating thereto.

Chapter VI: asymmetric dimensions in Greek temples. This chapter relates the earlier observations of Dörpfeld on the subject of predetermined asymmetric columnar spacing to the later and more numerous observations of Koldewey and Puchstein, with specific measurements for every temple quoted; the margin of mason's error in tolerated and unsystematic irregularities is also shown to have been greater in sixth-century Greek temples than it was in the mediæval cathedrals.

Chapter VII: optical effects of the asymmetric dimensions in Greek temples and modern interest and significance of the Greek refinements.

This is a magnificent volume with 38 full page plates (6 x 9 in.) beside numerous cuts accompanying the text. We are specially pleased to recommend the volume to readers of RECORDS OF THE PAST.

FREDERICK B. WRIGHT.

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INDIANS OF THE SOUTHWEST[1]

HANDBOOK Series No. 2, issued by the American Museum of Natural History, has just appeared. In it Pliny Earle Goddard, the associate curator of Anthropology of the Museum, presents a brief popular survey of our *Indians of the Southwest.* The author has been very successful in giving a general view of the *Ancient Peoples,* the *Modern Pueblos,* and the *Nomadic Peoples* of our Southwest so far as our study of these subjects has advanced. The principal cliff-dwellings, cavate lodges and communal buildings are described. He also gives glimpses of the home life as revealed by the household utensils, farm products and objects of a religious nature.

Somewhat more space is devoted to the modern pueblos, their distribution, history, buildings and arts, social customs, religious beliefs and ceremonies.

In Chapter III nomadic peoples as distinguished from the sedentary inhabitants of the pueblos are treated in the same general way as the modern pueblos were in Chapter II.

In conclusion he says: "While it is true that in certain main features the Indians of the Southwest share in the cultures of the north and the south, in many respects their culture is unique. The location of the prehistoric houses under cliffs, the terracing of the upper stories of the community houses, the details of dress, the designs found in pottery, baskets and blankets, the relationship of clans to priesthoods, and perhaps the greater part of their ceremonial life appear to be the main elements of a special culture confined to the Southwest and probably developed there."

The book is well illustrated with a folding map and a large number of good halftones. A very brief bibliography is added. The book is intended for the general public which knows little about this subject, and for them it will serve its purpose admirably.

CHINA AND THE MANCHUS[2]

ONE OF THE latest volumes in that remarkable series of books on historical and scientific subjects under the general title of The Cambridge Manuals of Science and Literature, published by the Cambridge University Press, London, Putnam's Sons, New York, is *China and the Manchus.* The author, Herbert A. Giles, LL.D., is specially fitted to write on this subject as he was for some time

[1] *Indians of the Southwest.* By Pliny Earle Goddard, Associate Curator of Anthropology, American Museum of Natural History. Pp. 191, folded map and 71 illustrations. New York: American Museum of Natural History, 1913.

[2] *China and the Manchus.* By Herbert A. Giles, M.A., LL.D. Pp. vii, 148, 2 illustrations and folding sketch map. 40 cents net. New York: G. P. Putnam's Sons, 1912.

H. M. B. Consul at Ning-po, Che-kiang, China, and is now professor of Chinese in the University of Cambridge.

Although only 150 pages are allotted the author to cover a long period of history he has been very successful in presenting the main facts in a popular style which will commend it to the general reading public.

This is an opportune time to present such a book for the great forward strides which China is taking and the ambitious program set forth by the new Chinese Republic has riveted the attention of the civilized world. In order to know the latent forces in China which are now appearing we need to study the past history of the country. Few of us realize the anomalous position occupied by the Manchus in China, or the smoldering fires of rebellion which have kept burning within the Chinese people now and then to appear in open revolt against these foreign rulers. Many of these revolts were in reality against the Manchu dynasty although that did not appear on the surface.

Another feature, beside the brevity and popular character of the book, is its small size, 5 in. by $6\frac{3}{4}$ in. This will be especially appreciated by those who have to do their reading "between times."

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EDITORIAL NOTES

AN ANTIQUE SLOT MACHINE.—At Baskingstoke, Hants., England, there is preserved an old japanned iron tobacco box, which was opened by dropping a coin in a slit and then pressing down a knob. The following inscription is on it:

> A halfpenny drop into the till,
> Press down the knob and you may fill.
> When you have filled, without delay
> Shut down the lid or sixpence pay.

WORK TO BE RESUMED AT SARDIS.—Prof. Howard Crosby Butler will resume work at Sardis, as he has received word that a new permit has been issued for his excavations at that site. He started immediately from London for the field.

ANOTHER HOUSE OPENED ON THE PALATINE.—It is reported that Professor Boni has opened a house of the imperial period on the Palatine. This was partly uncovered in 1730, and reburied. Inscriptions and other evidences lead Professor Boni to think that this was the residence of Tiberius Cæsar and Julia, daughter of Augustus. The fittings are luxurious, including a large bath and hot and cold water supplies. There is an underground cell, tentatively identified as the prison where Drusus starved to death as narrated by Tacitus.

FOUNDATIONS OF A TEMPLE OF MINERVA AT SYRACUSE.—There are reports of the discovery of the foundations of a Greek temple dedicated to Minerva at Syracuse, Sicily. It dates from the V century B. C. Borings have yielded fragments of marble, polychrome tiles, Protocorinthian vases and ivory statuettes. Several buildings are superimposed.

CEMETERY IN EASTERN CRETE.—Edith H. Hall describes, in a pamphlet on *Excavations in Eastern Crete Sphounguras*, a cemetery on a steep hillside. In 3 weeks 150 burial jars were found containing human remains, most of them belonging to the late Minoan I period, of which no burials had been found previously. Aside from the bones, pottery, seals and other objects were found.

HITTITE USE OF AN OX HEAD TO SCARE AWAY POWERS OF EVIL.—On the rocky wall of the old road which led to the ancient city that stood above the Phrygian "Tomb of Midas" is a remarkable Hittite monument. "A deity holding the caduceus in his hand stands in front of an altar above which are 3 Hittite characters. The caduceus is met with in the Hittite inscriptions in connection with a gate; it represents the head of an ox on a pole, which was set up at the entrance to a city like the head of an ox which was similarly hung over or near to the door of a house." Prof. A. H. Sayce thinks this was used "like the horseshoe

in our own country," and was intended to "scare away the powers of evil." In RECORDS OF THE PAST, Vol. VI, 1907, pp. 99–102, Mr. G. E. White described a number of Hittite examples of cattle worship and gives a picture of a flour mill in Asia Minor with wooden horns at the top of the flume through which the water to turn the mill is conducted. This is evidently a survival of the ancient Hittite cattle worship.

EXCAVATIONS IN GIBRALTAR CAVES.—In September, 1912, more excavations were carried on in the caves at Gibraltar. One 710 ft. above the sea in the eastern face of the Rock was partially but systematically excavated. Nearly 300 stone flakes or implements were obtained, most of them of material foreign to the locality. Several resemble palæolithic forms of the Aurignacian period, but are referable to the neolithic period. A metal adze of late date is composed mainly of copper with some lead but only a trace of tin. The animal remains are identical with those found in Sewell's Cave and described in reports of Dr. Duckworth's work in 1910 and 1911. Judge's Cave yielded implements, pottery and bones, including human remains.

ORIGIN OF ANIMAL SYMBOLISM IN BABYLONIA, ASSYRIA, AND PERSIA.—At the meeting on December 11, 1912, of the Society of Biblical Archæology (London) Mr. L. W. King read a paper on the *Origin of Animal Symbolism in Babylonia, Assyria and Persia.* In discussing the origin of the extensive use of colossal lions and winged bulls in the Assyrian palaces he admits that astrology formed an important section of the Babylonian religious belief but says "many features of the Babylonian religious system for which an astral origin has been confidently assumed, should really be traced to a far simpler and more primitive association of ideas." *Sound* rather than *sight* he considers the "more important factor in determining the outward form of many a mythological creation."

He refers to the work of M. Leon Heuzey who has pointed out that "the figure of a bull surmounting the sound case of a great harp or lyre in another Sumerian bas-relief is intended to suggest symbolically the peculiarly deep and vibrant tone of the instrument; and he confirms his suggestion by quoting the description of a similar instrument of music from a contemporary text where it is said 'The "portico" of the lyre was like a bellowing bull.' He also refers to the 2 animals, resembling lions, which, in representations of the great Gate of Heaven upon cylinder-seals, are always set immediately above the doors."

The doors of the Babylonian heaven were like the doors of any large eastern courtyard—huge constructions of wood with great metal pivots on which they turned, grinding in stone sockets. On a cylinder of Gudea, about 2500 B.C., is this description of the doors: "The doors of cedar-wood, installed in the great gateway, were like the God of Thunder, thundering in the heavens. The bolt of the temple E-Ninnû was like a raging (hound), the pivots were like a lion. . . . . On the *gadu*, placed above the doors he (Gudea) caused a young lion and a young panther to dwell."

Evidently the symbolism should be traced to the grinding and groaning

when the doors were opened or shut. The noises suggested the cries of animals, which, in accordance with the tenets of primitive animism, were thought to inhabit the doors and guard them. Such probably is the origin of the winged bulls and lions in Assyrian and Persian palace gateways. The translation of such animals to the stars was a later idea. "It is noticeable that the divine emblems are there generally supported by a temple from which the dragon or other monster, when he occurs, seems to be emerging. This association of a monster with the temple has hitherto been left unexplained, but its symbolism at once becomes apparent if we assume that the animal was the temple's chief guardian and originally inhabited its creaking gate."

DISCOVERIES BEARING ON THE ANCIENT CELEBRATION OF THE "MYSTERIES" IN ASIA MINOR.—Prof. W. M. Ramsay has recently cleared a large hall in the sanctuary of Mên at Antioch. This was apparently a place for the initiation and the celebration of Mysteries. The hall had been thoroughly destroyed so that much of the equipment could not be understood. But in the center was an oblong construction resembling the *impluvium* of a Roman *atrium*. The arrangements showed, the explorers all thought, that some kind of baptismal rite must have been performed here in the water. Professor Ramsay's conclusion is that some form of baptism took place in connection with the mysteries. The baptism was not by bathing or complete emersion, but was slight in kind. The baptism took place in the presence of the god, for a marble seat stood at a little distance facing the water. This seat is dedicated to Mên in letters of a late period, probably of the early IV century. It is uncertain whether the seat was left empty, or filled by a priest or priestess. Professor Ramsay believes that "this part of the mystic ritual was late, and was designed to outdo the Christian baptism."

Another interesting discovery regarding the Mysteries as celebrated in Asia Minor under the late Roman Empire is that of a series of inscriptions found at Notion by Makridi Bey, of the Turkish Imperial Museum. These inscriptions record the visits paid by representatives of foreign cities to the oracle at Claros. "The foreign delegates came sometimes singly, sometimes in pairs or a small number; a chorus often accompanied or constituted the delegation. The chorus usually consisted of youths and maidens. Generally the singers are called *Hymnodoi;* but in one case they are *molpoi,* once the chorus comes 'in accordance with an oracle.' The delegates are usually called 'inquirers'. In one case the delegate was prophet of the Pythian Apollo at Laodicea on the Lycus. The chorus sang a hymn in honor of the god."

Sometimes the inquirers were initiated into the mysteries. In connection with one inquirer a form of the verb ἐμβατεύω was used—evidently a technical term in the Mysteries. This is a word used by Paul in Colossians ii, 18. In the Revised Version this reads: "Let no man rob you of your prize by a voluntary humility and worshiping of angels, dwelling [ἐμβατεύων] in the things which he hath seen, vainly puffed up by his fleshly mind." This is a much-disputed passage. Evidently Paul caught this word from

the ritual language of the Mysteries, and here refers to their teaching and ritual. "This verse is most vivid, if its refers to a 'mystes' who has perturbed the Colossian Church by introducing the unspiritual things and teaching of the Mysteries, *i.e.*, what he has seen (and received from the hand of the hierophant); compare 21 f."

The language of St. Paul implies contempt and condemnation; yet not absolute as was his denunciation of idolatry. He seems to recognize the teaching of the mysteries as erroneous groping after truth. It shows Paul as no absolute foe to philosophy.

"The meaning of St. Paul's words in Colossians ii, 18, depends on the sense of the technical term. This is obscure." This seems to have been the completing stage of the ceremonial and perhaps the word "implies 'to put foot on the threshold,' *i.e.*, enter on the new life of the initiated; and it contains both meanings in the Revised Version, 'take his stand upon' and 'dwelling in.'"

The date of these Clarian inscriptions is about 150 A.D. or later. "This technical word was in vogue both about 50 and 150, and therefore must have been a permanent fact of the Asian (shall we say Phrigian?) Mysteries; it probably refers to some symbolic act performed by the newly initiated, expressive of entrance on a new life. If that be so, the part of the enigmatic equipment which we found in the Antiochian hall of initiation was the gate of entrance to the new mystic life and the gate led up to baptism in the presence of the god according to the latest addition to the Mysteries."

These inscriptions were published in the Austrian *Jahreshefte* of December 5, 1912.

COLOSSAL STATUE AT BARLETTA.—The checkered existence of a colossal statue of a Byzantine emperor was related by Dr. R. Delbrück, the head of the German Archæological Institute, at the opening meeting of the British School of Rome on January 31. He stated that "When the Latins captured Constantinople in 1204, the Venetians carried off a number of statues which had adorned the capital of the Byzantine Empire. Among these there was the colossal statue of an emperor, which was shipwrecked off the Apulian town of Barletta, where it long remained lying on the beach. Soon after the year 1300 the monks of Manfredonia, at the foot of Monte Gargano, received permission to found bells out of the statue, and actually used the arms, legs and helmet of the figure for that pious purpose. The rest of the mutilated statue served to ornament the fish and vegetable market of Barletta, under the name of 'Arè' (or 'Henry'), and miraculous tales were told by the local fishwives about the monster. At the end of the XV century, when culture was in the air, 'Arè' received new brazen arms and legs, and was placed in his present position in front of a loggia near the principal church from whence it is proposed to remove him to the railroad square as soon as the Apulian aqueduct is finished."

EXCAVATIONS AT SARDIS.—The city of Sardis owed its greatness both to the natural wealth of Lydia and to the commanding position it

occupied in relation to the great trade routes. "Sardis was built on the main Hittite road—the 'Royal road' of Herodotus—at a point where one branch went to Ephesus, a second to Cyzicus, a third to Smyrna and a fourth to Phocæa." Although her period of greatest prosperity was during the second millenium B.C., the city remained of considerable importance after conquests by Persians, Macedonians and Romans. It was a center of wealth and culture. Pliny mentions it as being distinguished in music and literature. The present excavations are revealing its art treasures. "The burning by the Ionians and Athenians in 499 B.C. of the Temple of Artemis led to the Persian invasion of Greece and the Battles of Marathon and Salamis. The present temple was, when built in 400 or 350 B.C., second in size only to that of Ephesus. The preservation of the ground plan and main (east) front, with colonnades made it the finest example extant of a Greek temple on such a huge scale. Excavations made in the necropolis on the hills west of the Pactolus River had yielded fine gold, silver and bronze ornaments, many engraved seals and some pottery dating back to the period of Crœsus. The most important finds were about a dozen inscriptions in Lydian script, among them a Lydian Aramaic bilingual (IV centry B.C.) the first clue to the Lydian language."

AN ABSURD SPHINX STORY DENIED.—A most remarkable story regarding the discovery by Dr. G. A. Reisner of Harvard University, of a series of temples in the head and body of the Sphinx appeared some time ago in both English and American papers—and even in one archæological magazine. In some unaccountable way a reporter imagined that the Egyptian temple Dr. Reisner is excavating near the pyramid of Mycerinus and which he described in the *Cosmopolitan Magazine* last year, was inside the head of the Sphinx. Elaborate drawings and diagrams of this were reproduced and a most amusing—to one not personally interested—account attributed to Dr. Reisner was reported.

Such mis-information is very trying to an archæologist, especially when he is so completely out of communication with the world that his denial is hopelessly behind in the race. The following letter from Dr. Reisner to the Boston *Transcript* is worth reprinting:

To the Editor of the Transcript:

Will you kindly permit me to make a statement in regard to the annoying fiction of excavations at the Sphinx, published in January by certain American and English papers? I left Cairo on February 3, and since February 8 have been working here on the northern border of Dongola—by a curious paradox the part most distant from Egypt. This district, the Kerma basin, is being laid under water according to one of those wise plans by which the English are developing the resources of the Sudan. The ancient remains consist of two enormous mud-brick structures and a cemetery, described by Lepsius in 1844, all of which are threatened by the irrigation scheme. With the friendly encouragement of the Sudan Government, I am making an effort to save the historical material. The work is extremely interesting; but the place is a bit lonely. One lives a strictly daylight life. Practically the only diversions, aside from the work, are produced by the dust storms from the Batn-el-Hagar, and the swarms of annoying insects called nimitti.

Owing to doubt as to my movements, my American mail of the first half of January has only just reached me. The reading of the newspaper clippings containing the

absurd Sphinx story has made my other discomforts seem insignificant. I suppose the tale is now beyond recall, but I would like the friends of the university and the Museum of Fine Arts to know the truth about the matter. The Sphinx is not in our concession. I never excavated in or at the Sphinx; I never intended to excavate in or at the Sphinx, and have no intention of doing so. I cannot imagine the origin of this absurd story.

GEORGE A. REISNER.

Kerma, Dongola Province.

RECORDS OF THE PAST

VOLUME XII MAY—JUNE, 1913 PART III

Vol. XII

RECORDS OF THE PAST

Part III

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MAY-JUNE, 1913

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POTSHERDS FROM HOUSE RUINS, SHOWING LUGS, DESIGNS AND CONTOURS

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RECORDS OF THE PAST

VOL. XII PART III

BI-MONTHLY

MAY-JUNE, 1913

A PREHISTORIC "CANNIBAL" HOUSE IN NEBRASKA

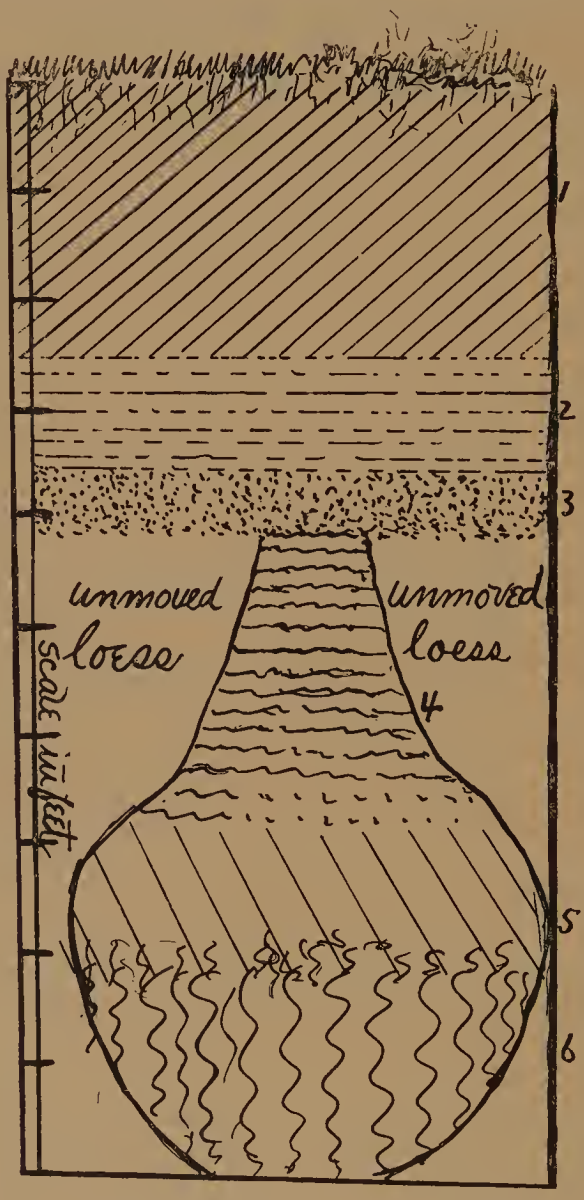
IN AN address welcoming delegates of the Mississippi Valley Historical Association to Omaha May 8 this year, Colonel John Lee Webster, president of the Nebraska Historical Society, made the first public announcement that the so-called "buffalo-wallow" type of aboriginal house ruin in Sarpy, Douglas and Washington Counties, Nebraska, is in reality rectangular and that their circular or ovoid appearance is entirely due to weathering.

Under title of *Discoveries Indicating An Unexploited Culture in Eastern Nebraska*, in RECORDS OF THE PAST, September-October, 1911, I presented a short description of the contents of the Nebraska house ruins and featured some of the more unique material they contain. When that paper was written it had not been positively determined that the ruins were rectangular and the credit of establishing that fact belongs to Mr. F. H. Sterns, a member of the Peabody Museum Staff, Harvard University, who made that and other important archæological discoveries during his season's work in 1912 in this vicinity.

Devoting his entire attention to exploration Mr. Sterns was able to perform an amount of excavation which, so far as I have learned, is unprecedented in extent by one man. Selecting two ruins of a surface diameter of approximately 45 ft. each, he removed all of the earth down to below the house floor and, when caches were encountered, to several feet deeper. In other words, he carried entirely across the ruin a ditch greater in length than the diameter of the ruin. His field notes, maps, reports, measurements,

photographs, drawings, etc., are more accurate and detailed than any which have heretofore come under my notice. From time to time, when opportunity offered, I visited Mr. Sterns' work and was much pleased with his method.

After Mr. Sterns' discovery that the ruins had earth walls 4 ft. high or deep, and that the houses were rectangular, confirmation of these facts

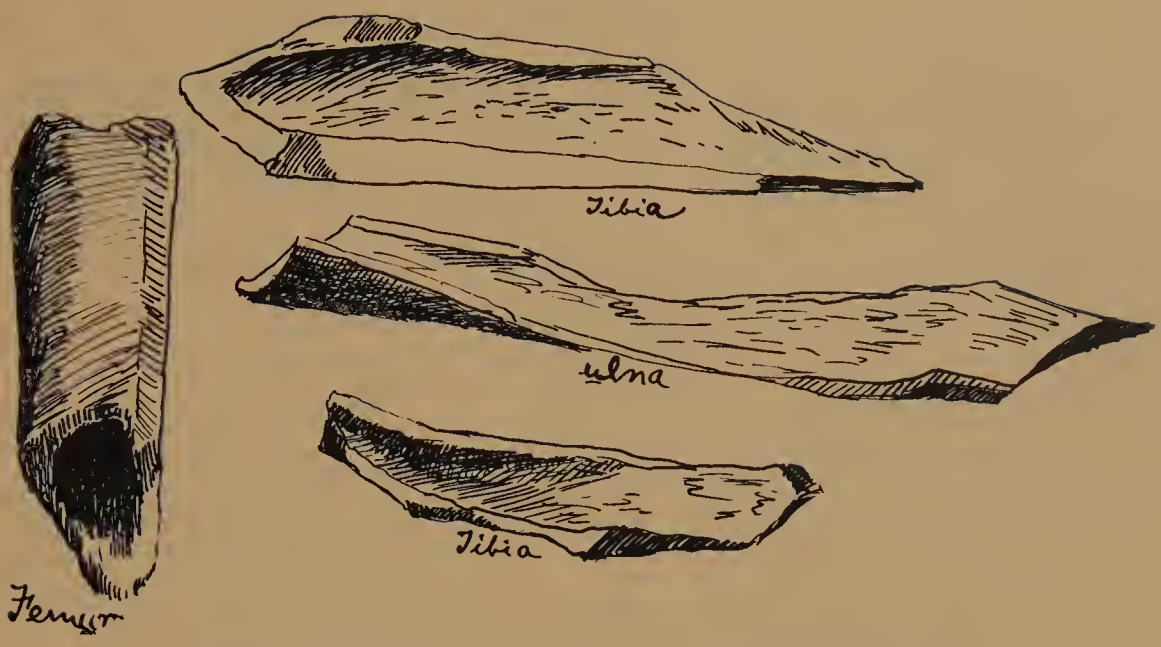


SECTIONAL VIEW CACHE NO. 3, "CANNIBAL HOUSE"

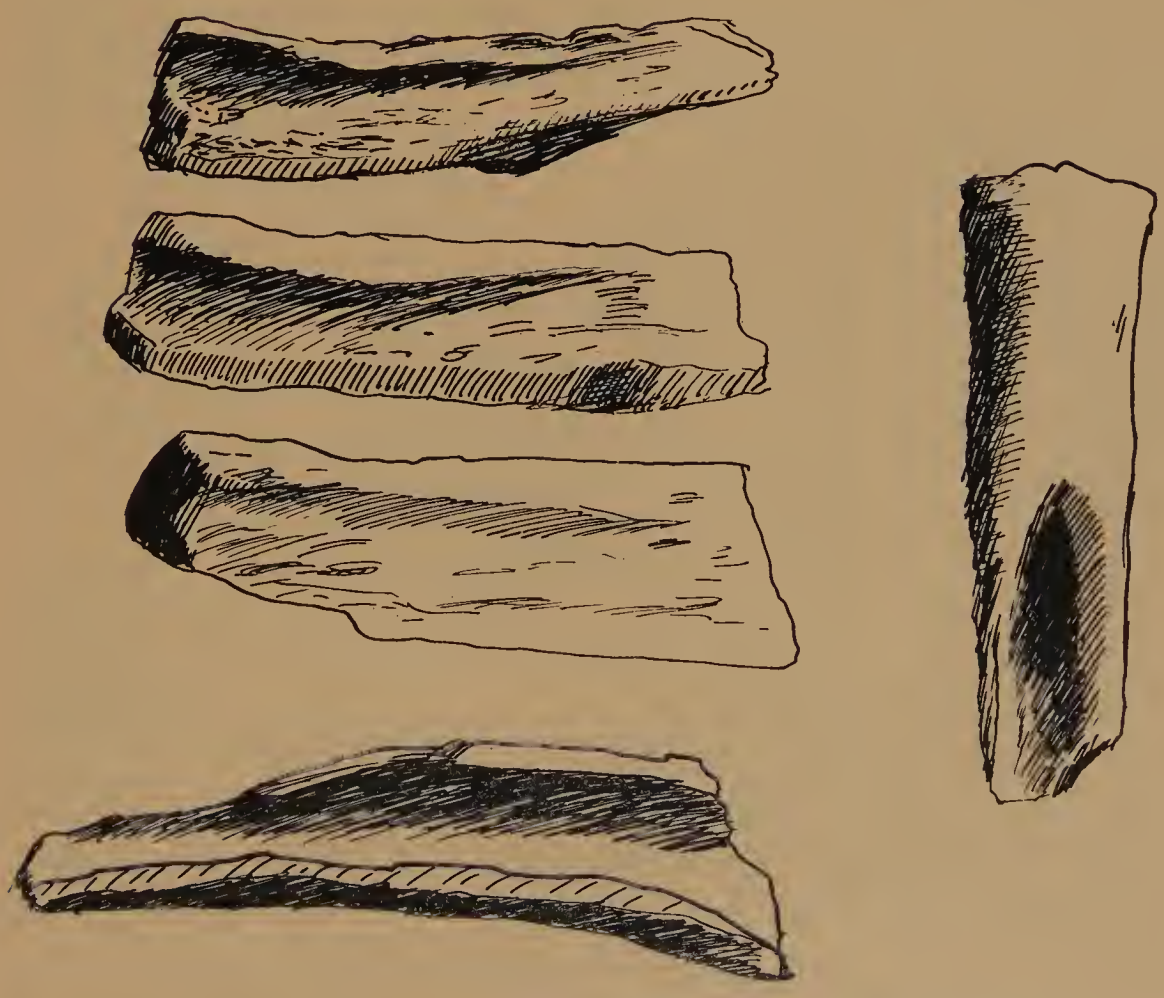
1, Accreted soil; *2*, roof material; *3*, house floor; *4*, cache filling (mostly clay); *5*, fractured skull and other bones and wood ashes; *6*, wood ashes, bone and stone implements.

was made by me while working over 3 old ruins. In one of these, 2 caches let into the side walls horizontally at a level with the house floor and the house corners were observed. Such is the character of the walls that their line is easily distinguished, in most cases it having been hardened by fire action.

Mr. Sterns is conducting further research in this vicinity this year and probably the year following, it being Professor Putnam's idea that thorough



FRACTURED HUMAN BONES FROM CACHE NO. 3



FRACTURED MAMMAL BONES FROM CACHE IN NEARBY RUIN

POTSHERDS FROM HOUSE RUINS

SKETCH OF CANNIBAL HOUSE PIPE. ACTUAL SIZE. SHOWING CONVENTIONAL DESIGN OF SOARING BIRD

exploration be continued in Nebraska before the plow accomplishes its work of destroying aboriginal earthworks. A complete report of Mr. Sterns' work will probably not be issued until full exploration has been made of all the ancient ruins and tumuli.

Determination of rectangular houses compels the conclusion of gable roofs instead of the dome-shaped earth lodges erected by all the sedentary Missouri and Platte River tribes.

A new feature was introduced into my field of labor in Nebraska by the discovery a year ago of a veritable charnel house in Sarpy County, showing strong evidences of cannabalism. In June, 1912, I explored a small ruin and on its floor were charred human bones many of which had been mashed, and near a large flat boulder, southwest of the fireplace in the center of the ruin, were many bone fragments. Beside the rock was an unshaped hammer stone which bore evidence of much use. My conclusions were that the bones had been broken for their marrow. Quite a number of fine bone and stone implements were secured from the ruin and the quality of the pottery was excellent, not differing from pottery found in neighboring ruins. A clay pipe embellished with two engravings of primitive man's conception of a soaring bird, looking not at all unlike the "glider" first built by the Wright brothers, indicated that the primitive artist and the highly developed Wrights had conceived their idea of a soaring bird from the same model, although hundreds of years separated in time.

POTSHERDS FROM HOUSE RUINS

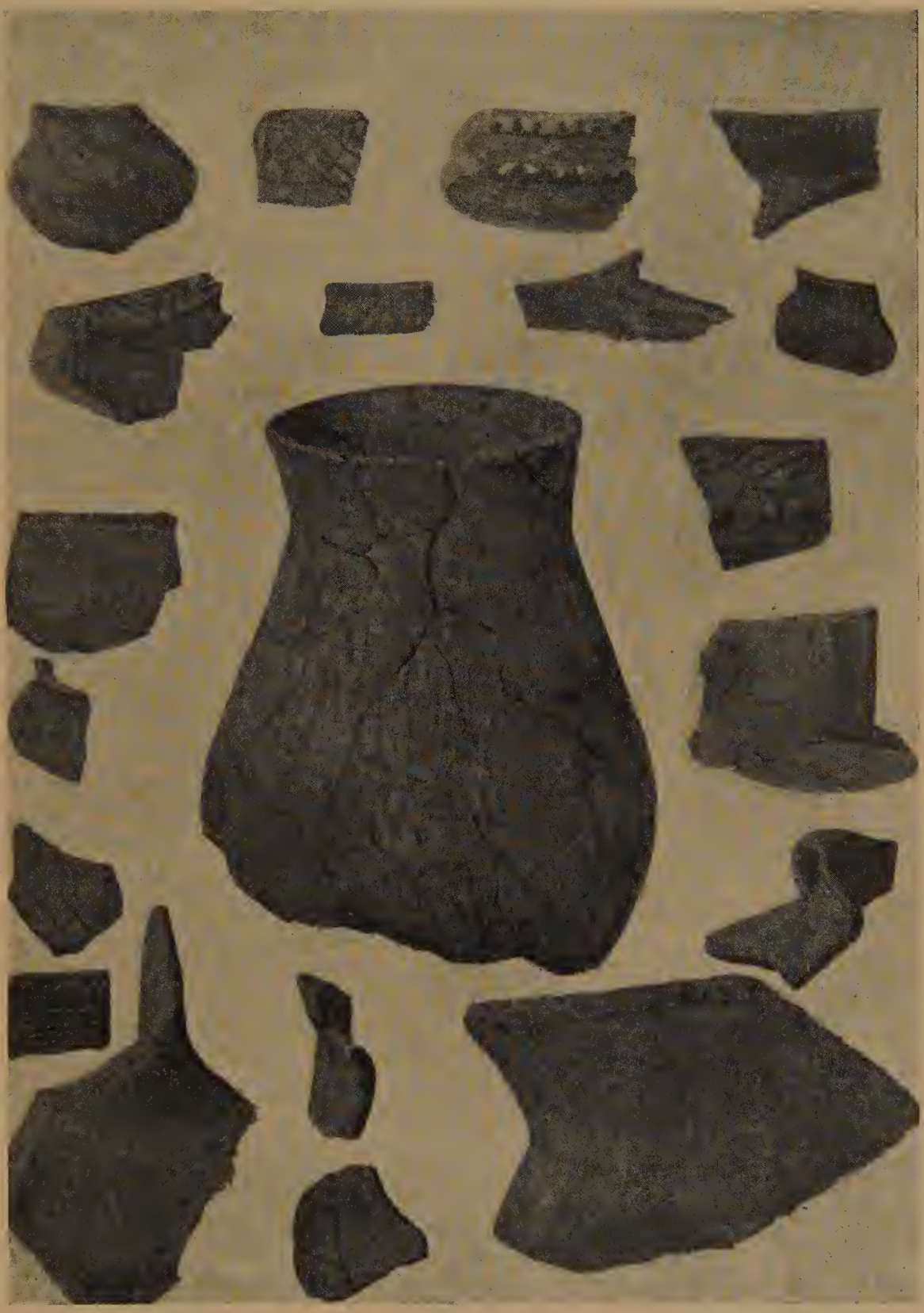
POTSHERDS FROM HOUSE RUINS

Three deep caches were located beneath the house floor all of them containing human bones together with objects of domestic use, all evidently having been deposited and carefully covered with preserving wood ashes. One cache in particular was filled with human bones and the "plant" seemed to indicate they had been deposited when covered with flesh. Seventeen frontal bones indicated that number of persons had been victims of cannibals. Most of the skulls were of women and children. Nearly all the bones in caches and on the floor were more or less burned and blackened by fire and reposing within a fractured pot were several rib pieces which had attained the color of bones after boiling.

Assisting in the work of exploration of the "cannibal" house at times were Mr. Roland B. Watson and Mr. F. H. Sterns, the latter acting as photographer, making plates of material in place, and when the camera could not be used I made pencil sketches. The whole work was conducted with extreme care and the impression of all the excavators was that the evidences of cannibalism were exceptionally strong. All the material from this ruin with the exception of a soapstone pipe, the clay pipe heretofore described and one scapula implement is now in the Peabody Museum, Harvard University.

In nearly all of the 32 house ruins I have examined I have found pieces of human skulls and other human bones, but never indicating that cannibalism was practiced.

When the Mississippi Valley Historical Association had completed its annual meeting in Omaha this year (1913), accompanied by Dr. Orin G. Libby of the University of North Dakota, who is secretary of the North Dakota Historical Society, and who has done a large amount of work in the Mandan, Hidatsa and Arakara Indian villages on the Missouri River in that state and who has also been studying the ethnology of the remnants of those tribes near Elbowoods, N. D., for many years, I visited the scene of my archæological labors in Sarpy county. Dr. Libby was greatly interested with the type of ruin found there and at first view he was inclined to consider them similar to Hidatsa ruins in North Dakota, but after careful examination he became convinced they were not like ruins in any of the ancient villages he had seen. The Sarpy county ruins are in no wise in village formation, a fact which puzzled Dr. Libby not a little, but he stated that any one of the larger Sarpy County ruins could easily have housed 200 souls, basing his statement on his knowledge of the population of the North Dakota aboriginal villages. The Hidatsa ruins, according to Dr. Libby, are probably as deep as some of the Nebraska type, but were not of similar shape and were certainly ovoid and not rectangular. Then, too, after careful examination of pottery taken from the Nebraska ruins, Dr. Libby stated emphatically that it in no wise resembled pottery from any North Dakota village site, nor had he seen similar decorations or contours in his state. In all we examined 40 ruins during our trip. The great size and present depth of the Sarpy County ruins was a cause of astonishment to the North Dakota scientist.



POTSHERDS FROM HOUSE RUINS

On looking over my collections Dr. Libby found several objects which he stated could be duplicated in the deserted villages of North Dakota, notably the comb made from antler and one large bone fishhook but most of the other objects were unlike artifacts from North State abandoned villages.

Archæologist in the field, ROBERT F. GILDER.
State Museum, University of Nebraska.

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AMERICAN PREHISTORY—THE HUT FOUNDATIONS OF COLCHA IN BOLIVIA[1]

MY GEOLOGICAL investigations upon the tertiary level of the Bolivian High Plateau in the freshwater limestones of the grand pampa of Sel around Uyuni have brought me in contact, near Colcha in the province Nord de Lipez at 12,100 ft. above sea level, with hut foundations occupied formerly by the predecessors of the present Quechuas. These hut foundations furnished me with an extremely interesting entire suite of the stone age. Let us mention hammers of whitish flint, slightly hollow, arrows with peduncles of blackish quartz and obsidian, amulets of pitchstone colored by carbonates of copper, besides some spades (*palas*) in metamorphic eruptive rock, a kind of hard schist, homologous with those which, in iron, are used at present in low culture. It is necessary to mention some debris of pottery, much ornamented and of good composition, more worn than the much more ancient painted vases *engobés* of Tiahuanaco.

As the question of primitive man in South America is in order since the recent publication of Mr. Ales Hrdlicka in the works of the Smithsonian Institution,[2] I avail myself of this occasion to give a general indication of the observations which I have personally made in Bolivia, concerning the prehistoric American. It is reasonable to suppose that the places of greatest elevation of the Bolivian high altitudes ought to contain the most remote stone industry of South America. In 1903 I discovered, between San Pablo and San Vicente de Lipez, above Cerro Relave or Relaves at 14,432 ft. elevation a large workshop of black and green quartzite points, in a spot far distant from all the habitations of the Quechuas Indians. This discovery has for me a great importance, for the borers and especially the scrapers bear a strong resemblance to our European neoliths. The scrapers are thick and heavy and their shaping is rather rude.

I consider the industry of Cerro Relave as the most ancient of Bolivia and perhaps of South America. At Huancane, above Cerro Huanco, between San Vincente and San Pablo at 14,268 ft. elevation, there also exists a very old stone industry; but in place of quartzite chippings as at Relaves, these

[1] Translated for RECORDS OF THE PAST from *L'Homme préhistorique* vol. xi, no. 2, February, 1913, by Helen M. Wright.

[2] *Early man in South America;* by Ales Hrdlicka, in collaboration with MM. W. H. Holmes, Bailey Willis, etc. Bureau of American Ethnology, no. 52, Washington, 1912.

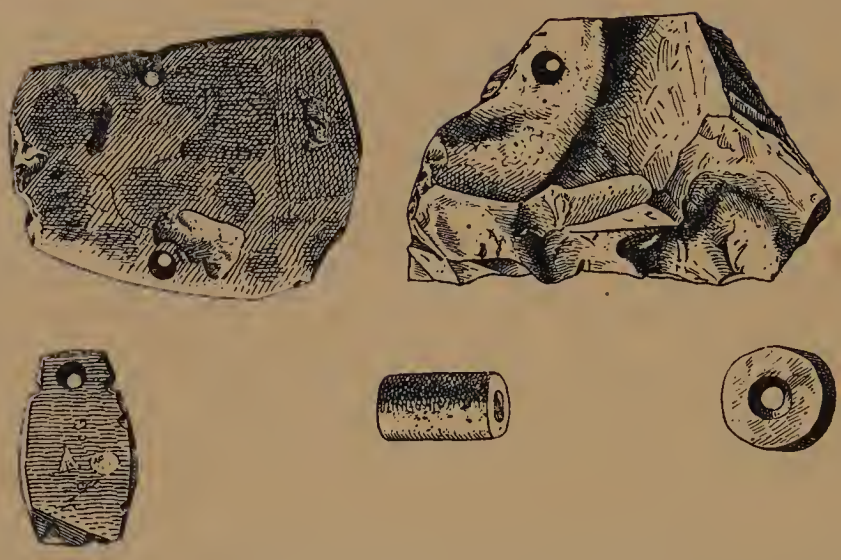
are jasperoid flint, taken originally from a trachytic rock. I shall guard against establishing any synchronism between the prehistoric period of America and Europe. The industries with neolithic facies of Huanco and Relaves seem to me to be contemporaneous with our palæolithic period. With regard to the American neolithic epoch properly so-called, it has lasted much longer than ours, since it still continues upon some parts of the high plateau and in the region of the Grand Chaco. It seems to me that when one wishes to study the prehistoric in America, it is convenient to abandon European classification and to make an American classification.[3]

As an example, for whatever concerns Bolivia and Chili, I have adopted, tentatively, the following arrangement:

PERIODS	INDUSTRIES	LOCALITIES
South American palæolithic with neolithic facies, of rather rude points.	Quartzite and jasper points (borers, scrapers); no amulets; no pottery; no burials.	Cerro Relaves. Cerro Huanco. (Quechuan territories.)
Fine period of South American neolithic.	Large sandstone and trachytic stones, constituting the monuments of Tiahuanaco, cut and polished by means of quartzite. Finished pottery *engobées* and painted. Use of *propulseurs*. Use of native metals (gold and copper principally); no bronze. Burials or *chullpas*. Writing on stone.	Tiahuanaco. (Aymaran territory.)
Decadence of South American neolithic.	Arrow points with and without peduncles, in chalcedony flint, in quartzite and obsidian; spades of schist (*palas*); course pottery. Burials or *chullpas*. Use of red and yellow ochre for tattooing. Amulets of turquoise. (Probable use of bronze). Writing on skins.	Colcha. Cobrizos. (Quechuan territory.)
Pre-Columbian Neolithic, relatively recent.	Arrows in chalcedony flint, wooden articles *de pêche*. Flint points recalling the Acheulean forms. Large hammers of flint with double wooden handle for extracting atacamite. Mat-work; spades (*palas*). Burials or *chullpas* in the raised beaches of the Pacific slope.	Chili. Chuquicamata. Antofagasta. (Territory of the Atacamenos.)

The excavations which I have carried on at Colcha in the hut foundations, gave me among others, 400 or 500 arrow points, mostly of quartzite, amulets and numerous beads in red calcareous silicates, colored by carbonates of copper. Amulets are represented by pendants, sometimes well polished with 1 or 2 holes for suspension, sometimes coarse fragments of colored pitchstone, the roughness of which was rubbed off by a very superficial polishing. Some beads of marine shells complete the series of trinkets (Fig. 1). It is important to observe that the holes for suspension of the amulets were made by double conical scouping out, in the manner of prehistoric perforations in general. At Colcha, many of the amulets are not finished; which proves that they were made on the spot. The principal material came from other widely separated regions.

[3] G. Courty *La question du Prêhistorique américain. Bull. Soc. Anthrop. de Paris*, 21 April, 1910.



AMULET AND BEADS FROM THE HUT FOUNDATIONS OF COLCHA
Drawing by A. de Montillet

Close by the pond Utul, I recovered, in the relatively recent alluvial deposits, some debris of red and yellow ochre for which the Quechuas of today search in order to paint their huts. These ochres originally served for tattooing, for at Cobrizos, I encountered in a burial contemporary with the hut foundations of Colcha, a little round terra cotta vase, with narrow neck, which contained red ochre. The sites of the hut foundations of Colcha are indicated by quadrilaterals in uncemented stones adjoining each other. They are composed of a base like a chess-board, still standing upright, thanks to the scarcity of rain in this region. The present Quechuas make pottery, coarser and more solid than that of their ancestors; they do not use ochre any more for tattooing; nor do they adorn themselves any longer with amulets; neither do they use arrow points. There is still the iron spade, identical with the *pala* of schist, which actually serves for planting potatoes. I shall not omit mentioning that the use of cocoa goes back to the night of time among the Indians of Central America.

The Quechuas of the hut foundations of Colcha interred their dead with the limbs flexed, either on the sides of the hills or *cerros*,[4] or in the rocky cavities laid out toward Chilala. I have myself taken out from a grotto the corpse of a mummified Quechuan, who had under him a spade of schist, *pala*, fastened to a wooden handle, about 1 ft., 3 in. long.

A disk amulet, round, in bronze, found in a burial or *chullpa* in the neighborhood of Cobrizos, gives us a glimpse of the use of bronze at a period very long before the arrival of Christopher Columbus in the New World.

As for the writing of the American Indians, the hieroglyphics of Tiahuanaco represent a very ancient stage of stone writing, of which the manuscripts are only the reminiscence, with great modifications.

In short, Relaves, Colcha, Cobrizos, Tihuanaco furnish us with precise indications of the advance of human evolution in South America.

The arrow points in quartzite of Bolivia and of Chili, as those in chalcedony of Upper Peru, actually known under the Spanish name of *crucitas*,

[4] The burials or *chullpas* of Colcha and of Cobrizos are recognized by some collections of circles of uncemented stones, such as form the entrance to a well. These circles of stone are nothing more than the base of a kind of little cairn, representing the entire burial.

represent, in the South American civilization, an epoch posterior to that of the large monuments of Tiahuanaco, during which people used *propulseurs* only, as in the decorations of the most ancient polychrome pottery.

In this very short account of American prehistory, I have related some indicatory views, based upon my researches upon the ground. I shall have great satisfaction if these observations can, in the near future be partially confirmed.

G. COURTY.

Paris, France.

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THE PHILISTINES AND ANCIENT CRETE—CAPHTOR, KEFTIU, CRETE

THE mention of the Philistines and their connections in the Bible is indeed most interesting; but it should be the more so to us now since we know something more about these people from an entirely new source. The recent excavations in the island of Crete have revealed to us much that is of interest. They have increased our knowledge of ancient history, I might say of pre-history, that is, history before the authentic history of the written records. In 1900 Dr. Evans began his excavations at Knossos in the northern part of the island, and since that time he and others have carried the work steadily forward. The palace of many passages and rooms, adorned with many striking frescoes, the original of the fabled labyrinth, was here at Knossos. Phæstos, too, and Gournia and Palækastro have added their share to our knowedge of the civilization of the age of bronze in ancient Crete some 2000 years or more before the time of Christ. The end came about 1400 B. C. or a little later; the great past of Crete was then blotted out and the dark ages settled over the country.

In Genesis x: 14: we read: "Pathrusim and Casluhim (whence went forth the Philistines) and Caphtorim." Now these Pathrusim and Casluhim were tribes of Egyptian descent who lived in the northern part of Egypt and extended thence to the southern borders of Palestine. From other passages in the Bible we have good reason to believe that the relative clause "whence went forth the Philistines" should come after the word Caphtorim, and has for some reason become misplaced, a thing which so often occurs in manuscripts. These other passages derive the Philistines from the Caphtorim quite clearly. It is my purpose to quote them fully.

Amos ix: 7: "Have not I brought up Israel out of the land of Egypt, and the Philistines from Caphtor and the Syrians from Kir?"

Jeremiah xlvii: 4: "For the Lord will spoil the Philistines, the remnant of the isle[1] of Caphtor."

These two passages show very clearly that the Hebrews believed that the Philistines came originally from Caphtor, which is with reasonable certainty identified with Crete. In a passage in Deuteronomy we find further

[1] A. V. country.

confirmation of the fact that the Philistines came to their country from outside and subjected the tribes that were already there.

Deuteronomy ii: 23: "And the Avvim which dwelt in villages[2] as far as Gaza, the Caphtorim, which came forth out of Caphtor, destroyed them, and dwelt in their stead."

In the following passages the Philistines are mentioned in close connection with the Cretans, for these are meant by the Cherethites; one people is identified with the other; indeed the Septuagint reads Cretans for Cherethites in these passages.

Ezekiel xxv: 16: "Because the Philistines have dealt by revenge, ... (16) therefore thus saith the Lord God, Behold I will stretch out my hand upon the Philistines, and I will cut off the Cherethites, and destroy the remnant of the seacoast."

Zephaniah ii: 4–6: "For Gaza shall be forsaken, and Ashkelon a desolation: they shall drive out Ashdod at the noonday, and Ekron shall be rooted up. Woe unto the inhabitants of the seacoast, the nation of the Cherethites! The word of the Lord is against you, O Canaan, the land of the Philistines; I will destroy thee, that there shall be no inhabitant."

Again in I Samuel xxx, 14 and 16 we find the Philistines and the Cherethites clearly identified. The Pelethites mentioned in II Samuel viii: 18 with the Cherethites as forming the bodyguard of David are without doubt one part of the Philistines.

Our evidence is quite enough to convince us that the relative clause in Genesis x: 14 "whence went forth the Philistines" should come after the word Caphtorim, so that the whole will read thus: "Pathrusim, and Casluhim, and Caphtorim (whence went forth the Philistines)."

The only reasonable explanation of this verse with the relative clause after the word Casluhim is that the Philistines were originally an Egyptian people living on the stretch of coast from northeastern Egypt to the southern border of Palestine, and that these people later received an addition from Crete; this combined people then robbed the Avvim of their country and settled themselves comfortably in Palestine, until the Israelites in their turn robbed them. But this, in the light of our later knowledge, seems in accordance with neither probability nor fact.

An interesting statement found in Tacitus (*History* V, 2) is that the Jews came from Crete; his error is that he identified the Jews with the ancient inhabitants of Palestine, who were the Philistines. The ancients rarely distinguished the Jews from the other peoples of Palestine, the region in which they lived.

We call the people of Crete of the II and III millenium before Christ, the Crete whose civilization has so recently been revealed by the spade, the Minoans; and we apply the adjective Minoan to both age and civilization. The name is derived from Minos, the name of an ancient Cretan king or line of kings. In ancient times many of the Minoan towns and trading settlements bore the name of Minoa; we find the name as far west as Sicily. The town of Gaza is connected with this Cretan civilization by

[2] A. V. which dwelt in Hazerim, even unto Azzah.

A KEFTIU BRINGING GIFTS TO THE COURT OF THOTHMES III; ABOUT 1550 B.C. WALL PAINTING IN THE TOMB OF REKHMARA AT THEBES

its other name of Minoa. In the region of Canaan where the Philistines lived specimens of late Cretan pottery have been discovered, and other specimens which were certainly local but show the influence of the Minoan work. Phalasarna was the name of a port on the northwest coast of Crete; this name seems to be connected with that of the Philistines.

In the later days of the power of Crete the evidences of communication with Egypt are stronger than ever before. In the Egyptian records appear over and over again the Keftiu, and in the paintings we see these people with the same dress, carriage, and characteristics, and the same products of art and commerce. The old interpretation was that these Keftiu were the Phœnicians, who formerly held all the credit for the early trade of the Mediterranean; but the faces are by no means Semitic. The name

means the people "from the back of *the Very Green*," the Egyptian name for the Mediterranean; this must mean the farthest distant people with whom the Egyptians had any dealings. The name well fits the Cretans. The pictures of the Minoans of Crete by their likeness to these Keftiu show us that these Keftiu were the people of Crete, and the paintings in Egypt represent the Cretan sailors and envoys. In Egyptain paintings the west is represented by the men of Keftiu, and Crete was regarded as towards the west; while the north is represented by the Semites, the south by Negroes, and the east by the men of Punt, that is Somaliland. In later Egyptian records we find that the name of Keftiu has disappeared, and in its place occur the names of many hostile peoples of the sea; these are probably remnants of the Minoan empire and some of the people who destroyed this empire. Toward the end of the XIII century we find the name of the Aqayuasha, who were probably the Achæans. These are the people who were the rulers on the mainland of Greece at the period of which Homer sings; they had conquered the former inhabitants and ruled as overlords. These are the people who forced some of the original inhabitants of the mainland out of their country, who came to Crete and caused the island trouble when they were not kindly received. Later the Achæans followed in their tracks, doubtless forced on from behind by still other waves of invasion; for this is very near the time of the Dorian invasion of Greece. Still later, about 1200, when a great invasion of Egypt was planned in the time of Rameses III, we find among the names the Danauna, clearly the Danaoi, who were the people forming the mass of the Greeks who fought at Troy, as we know from the Iliad. Among these names we find others which are certainly names of people from Crete. But the most remarkable in this group is the Pulosathu. These are the same as the Pelethites, and are to be identified with the Philistines. The Hebrew tradition was, as we have shown, that the Philistines came from Caphtor, and this must be the Egyptian Keftiu. These Philistines, then are the last remnant of the Minoan sea-power of Crete. Forced out of Crete by the invasions from the north, when the Cretan power was broken up, they tried to get a foothold in Egypt with these other invaders of that country; the whole expedition failed; Rameses defeated them; and after this the Philistines established themselves in the coast plains of Palestine, brought under their control the people of Canaan who were there before them and established a strong power. The Children of Israel were then called upon to contend with the last remnants of the famous old Cretan civilization. And David's bodyguards, the Cherethites and Pelethites, were the Cretans and Philistines.

ROBERT C. HORN.

Muhlenberg College, Allentown, Pa.

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COCK FROM ONE OF THE PAINTED TOMBS AT MARISSA

RECENTLY DISCOVERED PAINTED ROCK-CUT TOMB AT BEIT JIBRIN

READERS of RECORDS OF THE PAST will recall that in October, 1905 we published an illustrated article on the *Painted Tombs of Marissa* by Dr. John P. Peters. We are just in receipt of a letter from Prof. Camden M. Cobern of Allegheny College who has been spending some time in Egypt and Palestine stating that it has been his good fortune to discover another one of these most interesting painted tombs. He writes as follows:

DEAR MR. WRIGHT: I have just examined (April 18, 1913) a new rock-cut painted tomb recently discovered at Beit Jibrin by a native. It is smaller than those reported by Dr. Peters in *Painted Tombs of Marissa* but the art is very similar though the work is not quite as good. If the other tombs had not been dated as pre-Christian by their inscriptions, I would have certainly thought this to be Christian for the central decoration is a cross surrounded by a wreath (which is tied at the bottom by a ribbon) and bunches of grapes; the cross however was sometimes used previous to our era as a mere decoration and grapes also were often used with

or without religious signification. Two cocks resembling in size, color and style of art those found in the other painted tombs, were in prominent positions and 4 birds resembling the so-called "ibis" (which in the other tomb was on the crocodile) and 2 animals or fish too dim to be identified and some flowers completed the ornamentation. The tomb contains places for 2 adult bodies and 2 smaller cuttings which may have been for child bodies. The man who found it claims to have found 4 skeletons and considerable glass and jewelry in the tomb.

CAMDEN M. COBERN.

CAYUGA AND SENECA AS PROPRIETARIES IN THE ANNALS OF NEW YORK[1]

THREE hundred years after the discovery of Manhattan Island by Hendrik Hudson, there are still Indian land owners in New York state. White settlers have crowded in on every side of Indian reservations, yet in western New York stands Salamanca—a town built on part of the land still held by Seneca Indians, in regard to which there has been controversy for over a century. An innumerable band of white conquerors closed in on each Indian village, till all were threatened with such extinction as that by which the Connecticut Pequots were overwhelmed.

Crumbling tree-rooted hillocks mark the last fortress on Cayuga Lake, and the Cayuga nation is remembered by names given natural objects or towns. The claim for annuity made by Cayuga dwelling among the "Seven Nations in Canada" is almost their only appearance in the history of today; while, as a tribe, the New York Cayuga are utterly broken and scattered through the Seneca reservations at Cattaraugus, Allegany and Tonawanda, with a few residing among the Onondaga at their reservation near Syracuse.

The war-filled history of the 6 branches of the Iroquois league is well known. The Cayuga, at first sympathizers with the French, became British allies only after the battle of Oriskany in 1777, taking on each occasion the side of the stronger master. The following year, they, with the Seneca, made the error of joining in the massacre at the Valley of Wyoming, Pennsylvania. In return General Sullivan led the army of the colonists up the valley of the Mohawk, through the lake country of central New York, and completely devastated the territory, which received the first bitterness of their vengeance. The Cayuga as a nation never recovered from this blow. In the councils of the Iroquois they take a minor part. During the past century, however, in 1861, a Cayuga chieftain of New York, Dr. Peter Wilson, became Grand Sachem of the Iroquois, with the title "De-jits-no-da-wah-hoh."

Both white men and Indians practiced deception, although that of the latter seems to have been in self-defence, as the invaders were treated at first with the greatest respect. Every treaty with the Cayuga was broken

[1] Paper written for the 18th International Congress of Americanists, London 1912.

by force of later events, as they were too weak a band to protect themselves. Dr. Wilson called them "the dupes of fraud, avarice and inhumanity." Those Cayuga who moved to Ohio and intermarried with Shawnee, lost their annuity by the death of their last legal chieftain and the Shawnee claim was disregarded. By the law of female descent, the sons took their mothers' nationality and lost their claim to annuity. Possibly some case of this kind led part of the Cayuga band to claim money, signing as Tuteloes, members of a related nation, who had become tributary to the Iroquois in colonial times.

By United States treaty in 1789, Cayuga territory was reduced to 100 square miles, on Cayuga Lake, which they were to keep forever; but by 1807, poverty had obliged them to sell all but one square mile, called the Conoga Reserve, which also left their possession in 1841, after the departure to Canada of the chief Ojaghetti who made his home there. The Cayuga, however, who migrated to Canada are still a united band, living on Grand River, Ontario, since the beginning of the war of 1812.

The clause on restoration of rights in the treaty signed at Ghent in 1814, between the United States and Great Britain, has been a matter of debate up to the XX century, Lord Pauncefote's note accompanying the Cayuga petition, and Governor Roosevelt's negative reply, are reported, with other facts in New York Senate Document, No. 20, 1899, and Assembly Document 13, for January 10, 1900. Even more up to date is Assembly Document 40, February 20, 1906, relating to Iroquois property rights.

A full record of the many attempts to obtain, from the annuity of $2300, paid the Cayuga since 1795, a portion for the Canadian Cayuga, is given in the following documents of New York state: Senate Document 64, for 1849, shows a memorial concerning Dr. Peter Wilson's bringing back in July, 1847, the Cayuga persuaded to go to the far west by Dr. Hogeboom; Senate Document 58, 1890, gives his speech before the New York legislature, together with a long account of the cross-examination of many Indian witnesses and their testimony on the present state of their nations; Assembly Document 51 and Senate Document 35, for 1889, are full of data concerning the modern tribes. The only report favorable to payment of the Canadian Cayuga seems to have been given in Assembly Document 165, for March 16, 1849. Many references appear in other volumes, notably Senate Documents 70, 1847; 81, 1853; and 97, 1862; and Assembly Documents, 197, 1846; 55 and 61, 1848; 83, 1851; 26, 1853; 153, 1864; and 128, 1865. Granting this claim would mean payment of three-fourths of their annuity of $2300 to Canadian Cayuga, who are British subjects; and it has not been granted, as some of these very Indians or their fathers took arms against the United States in the war of 1812.

As a nation the Seneca are 10 times as numerous in New York as the Cayuga, although in Canada their numbers are about equal. That the Seneca did not admit the Cayuga to participation in their land rights is seen in Senate Document 56 for 1853. The curious customs of inheritance among the Iroquois by maternal descent has caused the claims of Cayuga to be taken up by Seneca and Shawnee men who married Cayuga women. Dr. Wilson's death about 1872 took away the most noted of Cayuga chieftains.

He helped them in many legal tangles, petitioned for schools and relief from taxes, and was one of the founders of the Iroquois Agricultural Society, which held its first annual fair at Cattaraugus in October, 1860.

New York in 1786 and 1788 ceded the right to "preëmption of the soil west of Seneca Lake," to Massachusetts, the title thus being disposed of while the Seneca were still in possession, but the civil administration remained with New York. From 1818, legislative records detail the struggle for possession of this territory. This was a large and vague dealing with property which might at some future time come into market, but which at the time held the homes, the hunting forests and the small world of the Seneca kingdom.

Massachusetts, however, soon disposed of these rights to two New Yorkers, Oliver Phelps and Nathaniel Gorham, and they to Robert Morris. The last-named gentleman seems to have conveyed the entire claim to the Holland Land Company, his agent being Samuel Ogden, who appears in 1791 selling the Massachusetts preëmption rights to Herman Leroy and others living in Holland. The Holland Land Company in turn sold it in 1810 to David A. Ogden, probably a relative of Samuel, who purchased it for $30,000. Mr. Ogden was at times associated with others of the same family name, first Gouverneur Ogden, then with Thomas L. Ogden, and the last finally entered into partnership with Joseph Fellows, who survived them all. In 1896 the United States House of Representatives considered purchasing the Ogden claims in New York, and in 1906 Charles E. Appleby, trustee of these claims, was offered $200,000, but refused it.

However, the Seneca tribe was unwilling to be shoved westward to other hunting grounds. Part of the tribe are now with others of the Iroquois at Grand River, Ontario, the first emigration occurring about 1813. These, with the St. Regis, who had also had their troubles with the Ogdens, are known as the "Seven Nations of Canada." As early as 1806, the Ogdens endeavored to eject two tenants, who had 999-year leases of the St. Regis Indians, from islands in the St. Lawrence River. Treaties in 1826 and 1838 ceded 197,000 acres of Seneca territory in New York, but the Indians declared the latter treaty to have been obtained by fraud. President Van Buren called the Ogden transaction "a most iniquitous proceeding." The Seneca presented December 18, 1841, a petition, as they were about to be deprived of lands by the Ogdens, and this vigorous action of the agents of the Land Company seems to have produced the idea of the westward migration to consider which councils were called in 1842 and 1846, the latter to prevent it. Whether Dr. Hogeboom was an agent of the Ogdens is unknown to the writer, but his unlucky pilgrimage with 215 Indians to Kansas and Indian Territory left the road strewn with dead. "More than one-half" were "consigned to mother earth," and the condition of the remainder on reaching the borders of St. Louis attracted universal pity.

A compromise was made in 1842 by which the lands at Buffalo Creek, Tonawanda, Cattaraugus and Allegany were released to the Seneca; but the right of preëmption of title is reserved to the Ogden Land Company or its heirs. The Seneca gave up Buffalo Creek, later, and in 1846 the Ogdens

tried to remove them from Tonawanda, and part of Allegany was sold in 1857. But that portion of Cattaraugus reservation, on which the town of Salamanca is built, is only leased by white men from the Seneca nation, as it cannot be sold except to the Ogden Land Company, and the Seneca wish to remain land owners. Even at this date tribal government continues among the Tonawanda Seneca; but they have no western reserve lands, as the Ogdens managed in 1857 to secure the Tonawanda Seneca lands in Kansas, some 7000 acres.

Indians of the various Iroquois nations were induced to emigrate to the west about 1849 by being given land at Green Bay, Wisconsin. This Wisconsin reserve of the Seneca was later exchanged for 1,874,000 acres west of the Missouri, for most of which direct application was made. In 1868 payment was offered for a portion of this at the price of a dollar an acre, making something like $824,000. About 1890 it became evident that $2,000,000 was coming to the Seneca. By 1907 there was still due in payment for these valuable Kansas lands the sum of $118,050.

The Cayuga tribe has also its grievance in regard to land sales, although it does not possess an acre of its own in the United States. By forced sales in 1795 and 1807 it received the annuity of $2300 as recompense; but within sixteen months, by a land sale in Albany, the state government realized $257,609 on the Cayuga territory. Many efforts have been made to reimburse the Cayuga nation, in their impoverished condition, for the injustice with which they were treated in this matter, but with no success.

The main body of the Seneca nation has a constitution of its own, accepted in 1847, and revised in 1898. They are reckoned among the "civilized Iroquois," and their tribal census of 3,000 is divided between the New York State reservations and the Canadian one at Grand River, Ontario. The Seneca are still "lords proprietors" of a portion of their ancestral lands. The New York Cayuga, forced to beggary by the conflicting claims of French and British, of England and her colonies, and finally of the United States and her land agents, have lost their lands, but still survive in the dignity of pensioners. Those of the Canadian portion are considered as "pagan" Indians. Possibly the new century may bring a recalculation of our accounts with this portion of mankind, so far behind ourselves in the advantages given by fortune, and from whom so much happiness has been rudely torn by the greed of the conqueror.

GRACE ELLIS TAFT.

New York City.

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REAR AND FRONT VIEWS OF A STATUETTE OF DIS PATER, FOUND AT VICHY

GALLO-ROMAN OBJECTS FOUND IN THE "BOURBONNAIS"[1]

AMONG some Gallo-Roman objects found in 1908 at Vichy was a limestone statuette about 7 in. high. Concerning this statuette M. le Dr. Chopard says: "It represents an old man, bearded and bent. A large cloak envelopes him. His thighs seem covered with Gallic breeches, or *braye* as the peasants of Auvergne still say in speaking of their pantaloons. The breeches appear to end in leggings. With his left hand, the old man carries a long mallet; in the right a spherical object.

"A tree is represented on the back of his mantle. This attitude and these various attributes recall the statuette, given by Duruy in the large edition of his Roman history, as the representation of Taranus, the god of the mallet.

"Our statuette does not present any difficulties of identification except in 2 particulars.

"1. The left leg is raised below a point of the cloak and rests upon a small barrel. We know that the barrel was already in use in Gaul, while in the Orient wine was put in goat skins and at Rome in large earthen amphoræ. Let us note in passing that the use of the barrel in Gallia Bracchata explains the relative rarity of large jars in our region; they begin to appear only in the valley of the Rhone.

"2. From under the part of the cloak raised, there projects horizontally the end of a receptacle—an urn, amphora or earthen flask.

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[1] Translated and slightly condensed for RECORDS OF THE PAST from *L'Homme préhistorique* vol. xi, no. 1, January, 1913, by Helen M. Wright.

"It is more simple to suppose that the sculptor has represented Taranus with more complete attributes than those which we see ordinarily. At the same time that he produces the barrel, Taranus pours out the storm. The upturned gourd does not symbolize that, as the hanging urn of the river divinities symbolize the water which they pour forth.

"With a mallet alone, however large it may be, you can never make a noise. With a mallet striking upon a barrel, you could make considerable noise. The mallet alone is the symbol reduced to its simplest expression. This symbol becomes complete by the juxtaposition of the barrel and mallet.

"This kind of small Gallo-Roman treasure is evidently the remains of a public oratory such as has been found in different parts of the sub-soil of Vichy. In front of it passes a Roman road from which I have seen the lower structure in concrete and cement dug up in Callon Street."

This statue corresponds well to the Dis Pater from these attributes: vase (olla) in the right hand; the mallet in the left; the wolf skin on the shoulders etc.

In connection with the little barrel, we call to mind that statuette in the description of a bas-relief from Toul, given in *Description raisonnée du Musée de Saint-Germain-en-Laye: Bronze figurés de la Gaule Romaine* (by Solomon Reinach).

"Meurthe. A bas-relief from Toul, lost at present, known only by a drawing preserved in the National Library. The god is standing with a dog sniffing 2 pomegranates on the right and 2 casks on the left (stone statue or bas-relief from Scraponne, a monument discovered in the XVIII century and later lost).

"Some of the identifications of this statue are Taranus, Dis Pater, or even Sucellus, the Good Smith. (Renel in *Les Religions de la Gaule avant le Christianisme* from a statue of Dis Pater upon the base of which was found the name of Sucellus). What we want to remember is, in the first place the presence of that modest limestone, in the midst of a Roman pantheon of bronze statues of high art, following the rather barbaric art of this statuette.

"If one compares this rude art with that which directed the sculptor of the statue of Mercury in stone from Volvic, discovered at Lezoux and which is actually under an arcade in the basement of the heart of the Museum at Saint-Germain-en-Laye, he notices, observing the whole proportion, a strong analogy in execution.

"We could infer from this, that, though the Romans imposed their gods which seem to have taken the first place, the ancient gods of Gaul were not abandoned and the Gaulic artists, still imbued with the barbaric art which characterizes the epoch, sculptured, for the use of the Gauls, popular statuettes, made to appeal to their imagination, and that the devotion to these could be approximated by the devotion to popular modern medallions.

"These rustic statuettes, like the barbaric imitation China and the little parish medallions, incarnated, so to speak, for the populace, the expression of their confidence in the gods, and their devotion to them."

This statuette of Dis Pater or Taranus from Vichy should be preserved. It is the property of M. Ferdinand Desbrest of Vichy.

H. CHAPELET.

Paris, France.

BOOK REVIEWS

A SOURCE-BOOK OF ANCIENT HISTORY[1]

PROFESSOR BOTSFORD in his *Source-book of Ancient History* presents a large amount of material from a great variety of ancient sources in such form that it is available for the use of students in secondary schools. It may be used to supplement any course in Ancient History, but was prepared with special reference to the author's *History of the Ancient World.*

The value of such a work is not merely in the material placed at the command of the pupil, but in the kind of mental training gained. For, "In text-books the material is so selected and arranged as to train the memory more than any other mental faculty. The sources, on the other hand, while bringing the reader into close, almost personal touch with the individuals and events treated, have the advantage of presenting a body of raw material, on which the mind may exercise itself, especially in discrimination. The selections would be robbed of this value by excessive comment and by the elimination of all obscurities, unfamiliar names and other difficulties. It will be a great advantage to the pupil to learn by experience that, without being able to pronounce every proper name or to clear up every difficulty in a given passage, he may yet extract useful information from it. With no detriment to himself or to others, he may learn, too, at an early age that neither teacher nor author is omniscient." The teacher is warned, however, against allowing the pupil to declare "off-hand opinions on subjects but partially and one-sidedly known."

The volume falls naturally into 3 parts, dealing respectively with *The Oriental Nations*, *Hellas*, and *Rome.* Each is prefaced by a short introduction concerning the sources quoted and a bibliography of such sources. The direct quotations follow, with headings and references in the margin. A few suggestive questions follow each chapter.

In discussing the value of written sources the author says: "We must discriminate between (1) contemporary sources, composed in the period to which they refer, (2) sources later than the period treated. The contemporary writer has the advantage of direct acquaintance with the condition or event or person he describes. His account therefore is always fresher and often more trustworthy than any afterward composed. We must keep in mind, however, that in many cases a later writer is able to take a broader, or more critical, view of a situation, and may in that respect be a more valuable authority. In every instance it is necessary to study the writer in order to determine his worth as a source."

H. M. W.

[1] *A Source-Book of Ancient History.* By George Willis Botsford, Ph.D., Professor of History in Columbia University, and Lillie Shaw Botsford. Pp. x, 594. $1.30 net. New York: The Macmillan Company. 1912.

A BIBLIOGRAPHICAL LIST DESCRIPTIVE OF ROMANO-BRITISH ARCHITECTURAL REMAINS IN GREAT BRITAIN[1]

ARTHUR H. LYELL has compiled a list of the descriptive material on the Romano-British remains in Great Britain. Although this work is of more interest to British archæologists, yet there is a valuable suggestion to us since there are several archæological lists which should be prepared for this country. It is the author's hope that this list may enable the student of the future to "easily obtain all available information regarding any excavated site. The List may also serve 2 other purposes: either to prevent needless excavations on sites that have been exhaustively explored or on the other hand to stimulate the thorough exploration and planning of sites hitherto only imperfectly investigated."

Such a bibliographical list of our mounds and earth works would be invaluable.

F. B. W.

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EDITORIAL NOTES

CORNER STONE OF OLD TOWN HALL AT HULL, ENGLAND. When the old Town Hall at Hull was demolished a few months ago, the coins from the corner stone were removed to the Wilberforce Museum. The same stone was used later as the corner stone for the new Guildhall of Hull.

THE PILTDOWN SKULL GIVEN TO THE BRITISH MUSEUM. "The Piltdown skull was formally presented to the Trustees of the British Museum at their meeting on February 22, when Mr. C. Dawson gave a short description of it and of the associated specimens and restoration. The skull will shortly be placed on view in the large hall of the Natural History Museum at South Kensington."

GREEK COIN FROM THE ISLE OF WIGHT.—A Greek coin is reported as found at Freshwater, on the Isle of Wight. British Museum authorities pronounce it "struck at Syracuse of Timoleon *circa* 345–317 B.C. Head of Zeus Eleutherios. The reverse is obliterated but at one time it had ΕΥΡΑΚΟΕΙΩΝ (Thunderbolt.)"

PURPOSE OF "KOLHONS" FROM BŒOTIA.—Prof. R. M. Burrows after examining about 400 " kolhons" from Bœotia offers a new theory as to their use. Archæologists have considered them as drinking vessels, but Professor Burrows points out that the rim is so fashioned as to make the vessel unspillable. He considers them not drinking vessels but lamps with floating wicks. If so the Bœotian lamp differed from the so-called Attic lamp from which the so-called Roman lamp with leaning wick was developed.

[1] *A Bibliographical List Descriptive of Romano-British Architectural Remains in Great Britain.* By Arthur H. Lyell, M.A., F.S.A. Pp. xii, 156. Cambridge: University Press. 1912.

ARCHÆOLOGICAL FINDS BENEATH THE VIMINAL. In the course of the construction of the new structure for the Department of Interior at Rome the Viminal is being demolished thus bringing to light whatever antiquities have been hidden by it. Certain remains of halls and galleries of thermal character have been found. At least five acres have been uncovered. A circular chamber surrounded by niches and columns of African marble was found; on the pavement was a crouching Vènus of Parian marble.

NEWCASTLE SOCIETY OF ANTIQUARIES.—The Newcastle Society of Antiquaries is the oldest provincial society in England for the study of antiquities. In February of this year the Society celebrated its 100th anniversary. The Society has had many distinguished members, but the thing which has contributed most to the success of the organization is the wealth of local material to arouse interest. The region has been the fighting ground of contending armies from Roman times through the various invasions.

ANCIENT MOSAIC FOUND NEAR ARLES, FRANCE.—In November, 1912, a mosaic was uncovered in the place de la Major at Trinquetaille near Arles. It will probably be removed to the Musée Lapidaire at Arles. Several small objects of bronze were found with it among them weighing scales, a lamp and a statuette of a gladiator. The latter is about 12 in. high and stands in an attitude of attack, though his visor is raised. "Covering his body with the shield on his left arm he looks for an opening to bring his adversary down with a stroke of the sword in his right, the square set figure showing in its artistic treatment a good deal of vigor and animation."

ROCK PAINTINGS IN TUNIS.—Rock paintings of an interesting kind in the south region of Tunis are described by M. Henri Roux and published in the *Revue Tunisienne*. One of these was noticed on a rock wall in the Djehel Bliji and it represents very likely a combat of men in conventional drawing and animals which it is difficult to identify. The age of this painting raises quite a controversy among scientists and some think that it is contemporary with the Berber civilization, that is intermediate between the stone age and the age of metals. According to this idea it belongs in the last part of the neolithic period. But M. Roux wishes to place it at a more ancient epoch and class it in the middle or first part of the neolithic period it being due to a civilization which is more ancient than the Berbers and M. Gobert also thinks that it is the work of negroid people to whom are due the flints of the neolithic age found in North Africa.

—*Scientific American.*

A NEW LAW FOR THE PROTECTION OF PREHISTORIC MOUNDS AND VILLAGE SITES IN OHIO.—The General Assembly of Ohio on April 19, 1913 enacted a law by which the Ohio State Archæological and Historical Society and kindred state societies will have the right of way in the matter of archæological research in the state. By the terms of this

law "Any incorporated association or society maintained by and operating for and on behalf of the state of Ohio, having for its purpose the preservation of prehistoric monuments or the exploration or examination of such prehistoric monuments . . . . for educational and scientific purposes . . . may acquire and hold any real estate in the state of Ohio which is the site of a prehistoric mound, earth or stone works or prehistoric village site." If necessary such an association "may acquire such real-estate by proceedings in a proper court in the manner provided by law for the appropriation of private property by a municipal corporation of this state."

EARLY CHRISTIAN ART—In a paper on *Aspects of Earliest Christian Art at Rome* read by Prof. Percy Gardner before the Society for the promotion of Roman Studies (London) the author pointed out that art was continuous from pagan to Christian times. Probably the first artists for the Christians were pagans who did not understand the meaning of their paintings. In the I century 2 noticeable tendencies in art were the introduction of rural scenes with nymphs and Erotes and the association of scenes from mythology having no close relation to one another. These tendencies continued into Christian art in the catacombs and on sarcophagi. Erotes and personifications were introduced, but Christian symbols were added. Orpheus also appeared, but with doubtful significance. In place of mythological tales, scenes from the Old and New Testaments were used. The scenes were often much abridged; old schemes with new meaning were used. On the surface nearly all the scenes portrayed have reference to deliverance from danger or death. Some seem to refer to actual persecution; others more generally to the future life. Baptism is alluded to by symbol; the type of the Eucharist is taken from the Greek sepulchral banquet.

ORIGIN OF THE STONE CULT

MENHIRS ARE STATUES OF GODS.—We know that in the medical pilgrimages which have for their object some debris from the prehistoric megaliths, 2 facts, which are derived from one another, are always mentioned, the touch of the patient upon the stone, and the production and absorption of a powder, obtained by scraping or picking the megalith. For example, the Foot of St. Roch, in Vendée.

These 2 operations have persisted when the stone had been replaced by a statue of a saint (in wood or plaster). Here are 2 examples: at Appeville (Eure), there is a saint, a healer, called Millefort. The base of the statue is of plaster; they scrape it and 2 large hollows like cups have resulted. From this they obtain a plaster powder which they make children swallow. At Bouillant (Oise), they touch the linen of the sick upon the statue of St. Guinefort.

The facts can be explained only if the rocks and stones have been, at a given time, transformed into gods; that is to say, considered as true statues of gods. One could trace the series back to the rough menhirs through the statue menhirs and the block statues.—[Translated from *L'Homme prêhistorique*, March, 1912, p. 102.]

SITE OF ROMAN VILLA AT PARIS.—In the course of work on the Metropolitan railway system of Paris the workmen, at a depth of nearly 5 ft., in front of number 6 rue Gay-Lussac, recently discovered a rubble wall of very durable material, cut by a drain, covered with a Roman layer. The whole width of the bottom of the drain, about 1½ ft., is covered by flagstones.

Upon referring to the grand plan of Gallo-Roman Paris according to the restoration of Vacquer, we recognize that we have found here the site of one of the rich Parisian villas of the late Gallo-Roman period, built upon the south side of the hill of St. Genevieve.

This brings to mind that sumptuous house of which numerous traces have been found previously in these quarters, notably 20 years ago, when the Luxembourg station was built. The villa, which was found with opening upon the rue Gay-Lussac, above the boulevard St. Michel, says M. Marcel Poëte, in the *Enfance de Paris*, comprised more than 20 rooms; in the center was the large atrium, upon which opened the piscina. The house was heated by a hypocaust, installed in the basement; the water conduits circulated in all the rooms. The wall was formed of pink cement and black marble.— [Translated from *L'Homme Préhistorique*, March 1912, p. 102].

HEATING ARRANGEMENTS OF AN ANCIENT ROMAN VILLA IN ENGLAND.—In an interesting paper on the *Heating and Ventilating Arrangements at the Ancient Roman Villa, Chedworth, Gloucester*, Mr. John Jeffreys described the building as originally one story high, built of limestone with a concrete floor supported on pillars about 2 ft. apart and 3 ft. high. At one end of this shallow basement the heating furnace still exists, approached by outside steps. "The furnace, constructed for burning logs, consists of a long flat table, breast high, with enclosed sides and open ends on which probably iron or pottery supports were placed to carry the fuel. Nothing of the kind, however, remains at the present time, although the skill of their artificers in working in metal is shown by the number of iron utensils for domestic use, articles of cutlery, etc., found on the site."

When the fire was burning, heat and smoke pervaded the whole space under the floor, warming it and the pillars. No smoke shaft appears anywhere, and no hollow spaces in the external walls for the passage of heated gases. But on the 4 sides are holes in the outside walls which probably afforded egress for the smoke. "In the internal walls of the principal rooms are vertical flues made of pottery communicating with the smoke chamber in the basement and having inlets to the rooms, the use of which is conjectural, theories hitherto advanced concerning the use of these inlets being unsatisfactory, for the reason that if they had been left open when the fire was alight, smoke would have found its way into the rooms."

It is suggested "that the flues were used only at night, the inlets to the rooms being closed while the furnace was alight during the day, when the family would be frequently engaged in out-of-doors avocations. With the approach of evening the fire would be allowed to die out, by which time the floor and pilæ would be sufficiently heated to retain enough warmth to last

through the night, when the openings in the external walls, previously described, would automatically act as inlets for fresh air, which, warmed by contact with the heated pilæ and floor, would enter the rooms through the flues in the internal walls, so affording ventilation as well as warmth."

EXCAVATION OF A ROMAN TOWN ON THE SEVERN.—Before the Society of Antiquaries (London) on April 10 Mr. J. P. Bushe-Fox read a report of excavations which were carried on last summer at the Roman town of Wroxeter, on the east side of the Severn. The area within the walls is 170 acres. About 2 acres were excavated near the center of the town, where 4 large houses facing a street were uncovered. This street seemed to be one of the main roads of the town and a direct continuation of the Watling Street which ran from the southeast of England through London and the Midlands.

"Although all the buildings found last year differed considerably, yet the general arrangement was similar. They appeared to have been large shops, with dwelling-rooms at the back and wooden or stone verandas or porticoes in front, under which ran a continuous pathway parallel to the street. The buildings had undergone many alterations during the period of the Roman occupation, which lasted for upwards of 400 years. One house showed as many as 5 distinct constructions, which had been superimposed one on the other. In connection with the houses were 5 wells, all of them stone lined and with an average depth of about 12 ft. One well was complete, with coping stones and stone trough, and appeared as it did when in use in Roman times."

Among the many small objects found were engraved gems from rings, brooches, portions of 2 small statuettes of Venus and one of Juno Lucina and a small pewter statuette of Victory. One of the most interesting finds was a circular bronze disk with a device in different colored enamels of an eagle holding a fish. It seems to be unique among objects from the Roman period in Britain.

There was a great variety of pottery; over 300 pieces bearing the potter's name. Between 200 and 300 coins ranging from Claudius to Gratian (41 A.D. to 383 A.D) were found. The site seems to have been inhabited from the earliest days of the Roman conquest. Its first occupation must have been a military one. The situation would have made it an excellent base against the turbulent tribes of Wales, which gave the Romans so much trouble.

The town appears to have been one of the largest Romano-British centers. In fact, it is the largest that can be nearly entirely excavated, for no large modern town has been built over it.

It is expected that further work will be done the coming summer.

PROFESSOR BINGHAM AND THE PERUVIAN GOVERNMENT.—During the last few months there has been considerable in the daily press regarding the treatment of the Yale Scientific Expedition to Peru, by the Peruvian government. The following letter from Professor Bingham to the editor of *Peru To-day*, and the editorial on it, which ap-

peared in the March issue of *Peru To-day* gives the position of both sides and will correct some of the misleading impressions which some of the reports have given.

NEW HAVEN, CONN., February 12, 1913.

DEAR MR. NOEL:

Thank you for sending me the copy of *Peru To-Day* with your editorial on the Yale Scientific Expedition. I have not been properly quoted in the papers, and I am very much obliged to you for giving me the benefit of your doubt in this matter. I have no criticism to make of the Peruvian government for listening to the protests of the Historical Institution against the granting of exclusive privileges. As I stated in my letter to *El Comercio,* which was printed in full about the middle of November, we did not seek or desire an exclusive concession. I am very glad that you can say that our help in the work of archæological investigations was appreciated. The only action of the government which I did not like, and which did seem to me both unjust and unfair, was their putting in the decree which allowed us to take our collections from the country, a warning that we should not "mutilate" or destroy the architectural monuments of Peru "in the slightest particular." And furthermore, the statement that we should not be allowed to explore after the first of December. Considering all that we had been trying to do to restore and protect Peru's wonderful architectural monuments, and, considering that our explorations have tended to aid Peru in her gigantic task of making topographical maps of the lesser known parts of her territory, these two clauses did seem very much in the nature of a gratuitous insult. Had we been careless in our work of excavating we should have deserved the extreme cautionary clause warning us not to mutilate in the slightest particular, and if our explorations had been carried on for a selfish purpose with secret commercial ends in view, it might have been good policy to have told us to stop our explorations on a given date, but to go to the length of instructing the local government officers publicly to see to it that not only our excavations, but our explorations must stop, implied a very serious criticism of our manner of work, and of our objects, which I believe was uncalled for and undeserved.

There was nothing to give us, or anyone else, the right to stigmatize the attitude of the government, so far as the concession for future work went, as unjust and unfair, and as I said in the beginning, any newspaper articles which you have seen which quote me as saying anything of that nature are unauthorized and false, and I thank you for being unwilling to believe them.

Sincerely yours,
(Signed). HIRAM BINGHAM.

J. V. Noel, Esq.,
Peru To-Day.
Lima, Peru.

EDITORIAL IN "PERU TODAY"

We are inclined to agree with Professor Bingham, in the letter which we print elsewhere, that the wording of the decree which allowed the Yale Scientific Expedition to take a collection of Peruvian antiquities from the country, was unnecessarily severe but at the same time we do not think that were was any deliberate intention on the part of the Peruvian government, or any of its officials to cast any reflection on the splendid work of Professor Bingham and his coöperators. We have not made any enquiries as to how the decree was prepared. Whoever wrote it, was evidently not familiar with the splendid work of the Yale Scientific Expedition, and what it had done for Peru. In any event, we know that President Billinghurst has more than once indicated his desire to help this good cause.

He found himself, however, at the beginning of his administration, confronted with a powerful protest against the granting of exclusive privileges, and decided to postpone the question until the next Congress, issuing the decree, the terms of which Professor Bingham objected to.

RECORDS OF THE PAST

VOLUME XII JULY—AUGUST, 1913 PART IV

Vol. XII **RECORDS OF THE PAST** Part IV

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JULY-AUGUST, 1913

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FIG. 1. ENTRANCE TO THEATER AT OSTIA WITH TEMPLE OF THE FORUM IN THE BACKGROUND

RECORDS OF THE PAST

VOL. XII

PART IV

BI-MONTHLY

JULY-AUGUST, 1913

A WALK THROUGH OSTIA

Not ever again at even shall ship sail in on the breeze,
Where the hulls of their gilded galleys came home from a hundred seas,
For the marsh plants grow in her haven, the marsh birds breed in her bay,
And a mile to the shoreless westward the water has passed away.
At Tiber Mouth, Rennell Rodd.

IT WAS a hot day in August, and Rome lay sweltering under the glaring sun. Under the circumstances, a trip to Ostia seemed like the proverbial leap from a common culinary utensil. But we had been promising ourselves to see it and our hopes had been again and again deferred until Ostia had become to us a sort of "Carcassonne." Fortunately, however, the "Servizio automobilistico della 'Società F.I.A.T.,'" which carries, twice a day, the royal mail from Rome to Castel Fusano by the sea, enabled us to realize our hopes with a certainty and swiftness undreamed of by the peasant in the poem of Gustave Nadaud.

Leaving the Piazza Venezia, we are soon speeding along the old imperial highway, the *Via Ostiensis*, which was once trodden by the countless troops that marched to Ostia to embark for conquest in distant lands, or to return for a share in some military triumph. Here and there, stretches of the old pavement and the remains of bridges can still be seen—rough memorials of a time when Rome ruled the world. Over this road Pliny the Younger must often have gone to the Laurentine villa whose charms he dwells on so fondly to his friend Gallus. "You can reach it by two roads," he says, "for both the *Via Laurentina* and the *Via Ostiensis* take you

FIG. 2. COLUMBARIUM OUTSIDE THE PORTA ROMANA

there, but you must leave the *Laurentina* at the fourteenth mile stone, and the *Ostiensis* at the eleventh" (Ep. 2.17). But as he and others of his class rode back and forth, they saw a country-side studded with villas, where we see only the undulating wastes of the Campagna and its great gaunt cattle with their spreading horns.

In an hour we are at the famous Castello which dominates the hamlet of modern Ostia (Fig. 10). This fortress, remarkable for its round bastions, harmonious lines, and excellent preservation, was built by Baccio Pontelli and Giuliano da Sangallo in 1483–1486, at the order of Cardinal della Rovere, who later became Pope Julius II. It is now used as a museum for some of the treasures recently excavated at Ostia. These treasures cannot be described here. It is enough to say that some specimens form valuable additions to the domain of Græco-Roman sculpture. This is notably true of the splendid torso of Bacchus,[1] a copy of the school of Praxiteles, the fine Venus, and the sarcophagus depicting three scenes of the myth of Meleager. The sarcophagus merits particular attention, in that it affords the best representation of the Meleager cycle known in ancient art.[2] According to Vaglieri,[3] the first scene represents the murder of the Thestiades; the second, the death of Meleager, and the third, the Meleagrides at

[1] cf. Vaglieri, *Notizie degli Scavi*, 1909, p. 86, and Fig. 2, p. 87.
[2] cf. C. Robert, *Die Antike Sarkophagsreliefs*, III, 2, s. v. *Mel.*
[3] *Notizie*, 1909, p. 87; Fig. 4, p. 88.

FIG. 3. THE WINGED VICTORY

the tomb. The whole is instinct with a fine dramatic intensity, and the modelling is exquisite. J. Carcopino, who has given an excellent appreciation of the whole, compares the mourners in the last scene to the sorrow-stricken figures painted by Giotto in the Arena at Padua.[4]

The road skirting the Castello leads one in a few minutes to the site of the ancient city, now being excavated with scientific thoroughness by Prof. Dante Vaglieri. Ostia was Rome's first colony, founded, as the Romans believed, by Ancus Martius. A settlement of some sort doubtless existed at the mouth of the Tiber from very early times. But a potsherd, showing an archaic type and treatment of the head of Athena, a collection of coins, found in 1909, and ranging in date from 254–159 B.C.,[5] and the remains of republican walls,[6] lead Vaglieri and Carcopino to believe that the founding of the present city can be definitely put in the first part of the III century B.C. In 266 B.C., the board known as *quæstores provinciæ Ostiensis*, was appointed at Rome to safeguard her maritime interests. Of the city as it existed under the Roman republic, however, comparatively little is known. Livy tells us that its citizens served as legionaries during the Hannibalic war (27.38) and later as marines (36.3).

Among other large projects cut short by the death of Julius Cæsar, was the plan for improving the harbor of Ostia.[7] For Ostia was by no means an ideal harbor. The Tiber, then as now, annually carried down an enormous amount of alluvial deposit and the larger ships were forced to unload part of their cargo upon lighters before proceeding up the river.[8]

Claudius, in the first years of his reign,[9] constructed a new harbor on the right bank of the Tiber about two and a half miles north of Ostia. Nero named this *Portus Augusti*, and the modern name Porto is only another witness to the persistency of Roman nomenclature. In spite of the diversion of trade caused by this change and by the further extensions of Trajan in 103, the prosperity of Ostia continued undiminished during the II and III centuries of our era. The wealth and commerce of the whole world, writes Florus (1.4), was received at Ostia as in a storehouse for Rome. But Ostia was more than a port: it was a city of pleasure, too, where refreshing breezes from the sea, as on our August day, brought delightful contrast to the heat of Rome. Many wealthy Romans had villas there. Indeed, the shore, says Pliny (Ep. 2.17) "is graced by a most charming array of continuous and detached villas which present the appearance of many cities, whether you look at them from the sea or from the shore." And men of lesser wealth, like Minucius Felix (*Octavius*, 2) and his friends (Macr. S. 7.13, 18) went there to enjoy the sea-baths in autumn.

Ostia suffered severely, again and again, during the incursions of the Visigoths in the first years of the V century and by the end of the VII

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[4] J. Carcopino, *Journal des Savants*, vol. 9, 1911, p. 456.
[5] cf. F. Gnecchi, *La Rivista Italiana di Numismatica*, 1909, pp. 11–19; Carcopino, *Jour. d. Sav.*, 1911, p. 467.
[6] Vaglieri, *Bullettino Communale*, vol. 39, 1911, pp. 225–245.
[7] cf. Plutarch, *Caes.* 58; Porphyrio, *ad. Hor. ars. poet.* 65.
[8] Strabo, 5. 3, 5, p. 231.
[9] Suetonius, *Claudius*, 20.

century it was practically abandoned. In 830 Gregory IV converted part of the city[10] into a fortress to withstand the Saracens. Their defeat here under Leo IV has been rendered famous by Giulio Romano's representation of the battle, in the Stanza dell'Incendio in the Vatican. Under Sergius II, however, between 844–847, the citadel succumbed to the invaders.

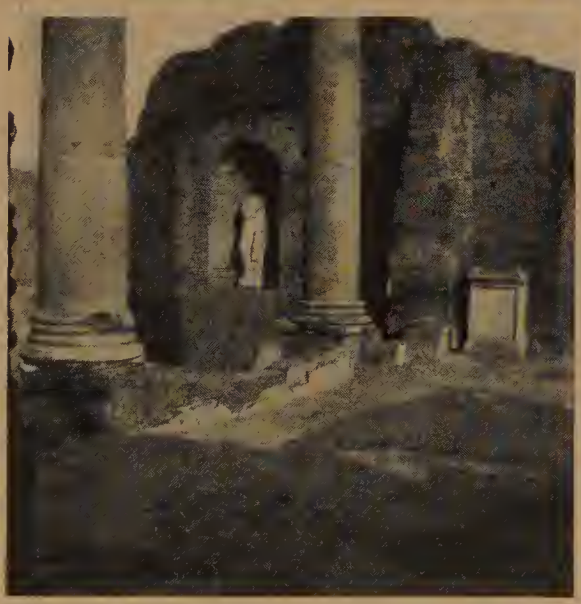


FIG. 4. ENTRANCE TO THEATER FROM INSIDE

FIG. 5. NICHE IN THERMÆ

FIG. 6. A WELL-PRESERVED STREET

FIG. 7. ENTRANCE TO THE THEATER

"Ostia did not die a sudden death," Lanciani[11] well says, "like the Vesuvian cities; it was not taken by storm and destroyed at one stroke by barbarian hosts, like Concordia Sagittaria; it was not buried under its own pall of ruins and never disturbed in its rest; Ostia died a lingering death, by

[10] The eastern part, near the Castello, according to Vaglieri; Carcopino, *Jour. d. Sav.*, 1911, p. 463, places the Gregoriopolis near the chapel of Quiriacus, farther to the west.

[11] *Wanderings in the Roman Campagna*, p. 56, 57.

FIG. 8. AMPHORÆ EMBEDDED IN WARE-HOUSE

starvation, inanition, consumption, decrepitude, pillaged at leisure by foreign and domestic marauders, open to all treasure-seekers, and only exposed to such ravages of nature as came from the periodical floods of the Tiber and from the growth of shrubs and trees over its mounds."

Under these conditions it might be supposed that the excavations would yield nothing of artistic value. But this is not the case. The efforts of the citizens to repel invaders called for defences, made in frantic haste, of whatever material came to hand. Then, too, the negligent attitude of the ancients toward what we today regard as works of art was doubtless responsible for the abandonment of much that is now valuable. But interesting as the finds from Ostia are, and always will be, they can never equal the wealth of Herculaneum and Pompeii, suddenly sealed up by Vesuvius.

Systematic excavations were begun in 1803 under Pope Pius VII, without revealing much of importance. They were resumed in 1854 under Pius IX and the relics discovered were placed in the Lateran museum. Under the directorship of Lanciani, 1880–1889, notable progress was made. But it has remained for Professor Vaglieri, director since 1907, to reveal ancient Ostia to the modern world. He did not, like his predecessors, aim at immediate and startling results. Instead, his aim has been to begin where they left off, to coördinate the work of previous excavators, and to proceed with scientific thoroughness. His monthly reports in the

FIG. 9. THE SO-CALLED "PALAZZO IMPERIALE"

Notizie degli Scavi are models of broad and accurate scholarship. To these he has added a popular account of his work in the *Cosmopolitan Magazine* for March, 1912, pages 440–450.

Just before entering the *Porta Romana* of the ancient city, we come to the extensive necropolis (Fig. 2) excavated in part under Visconti. The familiar niches for the funerary urns attest the usual practice of cremation, and put us in mind of the Columbarium of Pomponius Hylas and similar cemeteries on the Appian Way. In ancient cities, Boissier remarks, "one reaches the homes of the living after traversing the dwellings of the dead."[12]

Immediately inside the gate, the visitor is struck by a monumental statue of a winged Victory (Fig. 3).[13] The dignity of conception and the boldness of execution are at once apparent. The voluminous peplos, bound with a Greek girdle, falls in splendid lines which combine strength with grace, and which reveal the sure modelling of the form beneath. The influence of the best traditions of Hellenic art is unmistakable in this combination of the Nike and Parthenos types.

The main street (Fig. 13), called *decumanus*, over which the Victory stands a solitary sentry, stretches away for some 500 metres. Nothing, not even the dwellings and warehouses, recalls the busy past of Ostia so

[12] *Promenades Archéologiques*, p. 280.

[13] C. W. Keyes, *American Journal of Archaeology*, vol. 16, 1912, pp. 490–494, gives excellent reasons for regarding the statue as *Minerva Victrix*, rather than *Roma Victrix*, as suggested by Milani, *Notizie*, 1910, p. 229.

vividly as this wide, paved street lined with porticoes on either side. For this was the artery that transmitted life to ancient Rome. In the great solitude that hangs over Ostia today, one paces the street with mixed feelings of wonder and regret, as if one were a survivor of war and pillage and had come back to view his city as the barbarians left it.

The first street leading to the right from the *decumanus* is called the *Via dei Vigili* from the cohort of firemen (*vigiles*) who had their barracks here. Vaglieri's discovery of a large mosaic pavement a few feet beneath the street is evidence of the fact that some large building was ruthlessly sacrificed to make room for the superimposed street. The mosaic, in black and white, measures some 13 yards long and 9 wide and probably dates from the middle of the I century A.D. In the center is a space equivalent to 6 of the recurrent squares, containing 4 dolphins Above them are representations of 4 provinces, Sicily, Africa, Egypt, and Spain; and below, of 4 winds. The whole is a quite original attempt to interpret pictorially the commercial status of Ostia.[14]

The well-preserved *Thermæ* in the same street (Figs. 11, 6,) previously excavated in part by Lanciani, have been completely cleared by Vaglieri. The various rooms and elaborate system of heating Roman baths can now be studied to better purpose here than at Pompeii. But the most striking feature of the *Thermæ* is the splendid mosaic floor in two of the rooms. In one room Amphitrite is represented riding a sea horse and in the other, Neptune surrounded by spirited Tritons. They are in the usual colors—black upon a white ground. Indeed, so uniform are these colors in Ostia and so similar the manner of execution, that Carcopino[15] suggests that under Hadrian the city must have undergone extensive reconstructions and the mosaic decorations must have been the work of one school. Adjoining the *Thermæ*, doubtless a part of them, is a large *palæstra* beneath which a huge reservoir has been found.

The extensive barracks of the *vigiles* have now been completely cleared. In the center is a large open court—the *atrium*—and beside it is a sort of chapel designed for the soldiers' worship of the reigning emperor. The inscribed bases at the end were occupied by busts of the emperors of the II and III centuries. The mosaic pavement, representing a sacrificial scene, is in the familiar black and white, and is well preserved. The rest of the rooms were devoted to living quarters. In many places the walls are covered with graffiti. Doubtless the perpetrators of some of them are to be found in the list of soldiers of the century of Claudius, known from an inscription discovered in the course of excavation, who were stationed here from the Ides of August to the Ides of December in 166 A.D. Altogether, the structure is a most instructive commentary on ancient military life.

Vaglieri has so thoroughly cleared this quarter that one can now pass around the barracks into the *Via della Fontana*, which takes its name from the large fountain at its western end. It is a fine old street, lined with shops like those to be seen at Pompeii. The most interesting of these is the wine-shop of a certain Fortunatus. The mosaic, besides containing

[14] G. Calza has published a detailed account of the mosaic in *Bull. Com.* XL, 1912, pp. 103–112.
[15] *Journal des Savants*, vol. 9, 1911, p. 451.

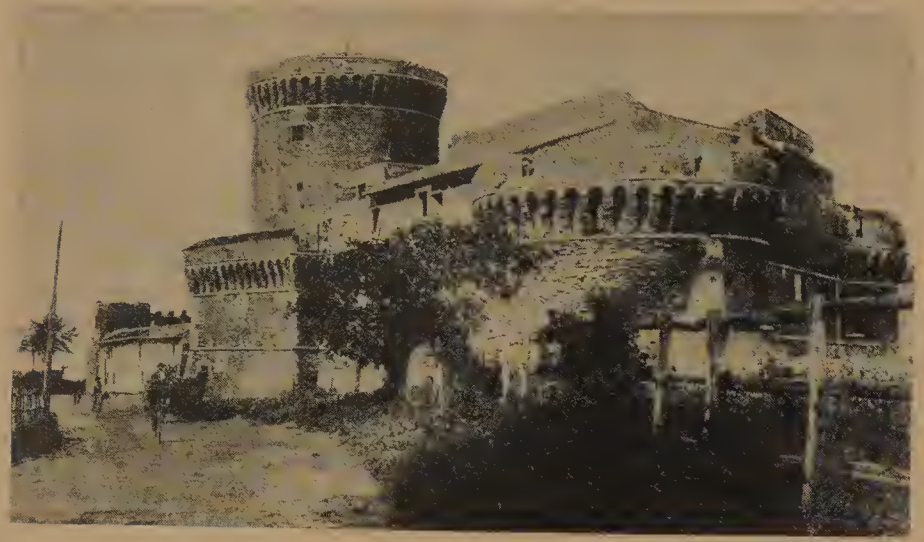


FIG. 10. THE CASTELLO
FIG. 11. ENTRACE TO THE THERMÆ

FIG. 12. TEMPLE OF VULCAN
FIG. 13. THE DECUMANUS

FIG. 14. TONE BOACCIANA

FIG. 15. VIA DELLA FORTUNA

the owner's name, bluntly invites the thirsty to drink. Sidewalk advertising, we are reminded, is not of modern origin.

Between the *Via delle Corporazioni*, so-called from the offices of the trades-guilds, and the *Via della Fontana* lie houses with wall-paintings in the fourth Pompeiian style. The names of the various guilds can be read in the mosaics—boatmen, grain-merchants, and others. Figure 17 represents the guild of the grain-measurers—*mensores frumentarii*. An especially elaborate one reads *Naviculari Misuenses Hic*—"Here are the ship-masters of Misua."[16] Beneath are 2 vessels meeting under full sail, 2 dolphins curiously wrought, 2 large fish, and something which may represent a grain measure. Now Misua was on the Eastern arm of the gulf of Carthage, and the guild bears witness to the commercial relations of the two cities.

The guilds occupy what were once the colonnades of the spacious forum, in the center of which rises the sub-structure of a temple, possibly the temple of Ceres. Overlooking the forum, immediately to the southeast, lies the theater (Figs. 1, 4, 7). An inscription records its restoration by Septimus Severus in 196–197.

A short distance from the entrance to the theater Vaglieri has discovered the ruins of a medieval church (Fig. 12) consecrated to the memory of Quiriacus, the first bishop of Ostia, 268–270 A.D.[17] Among the various fragments of sculpture, all in a disorder testifying to the devastation of the Saracens, is the lid of a sarcophagus bearing the words *Hic Quiriacus Dormit*

[16] *Notizie*, 1912, p. 172.
[17] *Nuovo Bulletino di Archeologia Cristiana*, 1910, p. 57–62.

MARBLE PEDESTRAL NEAR PORTA ROMANA, BEARING INSCRIPTION: SALUTI CAESARIS AUGUST[I] GLABRIO, PATRONUS COLONIAE, D[CRETO] D[ECURIONUM] F[ACIUNDUM] C[URAVIT]

in Pace—"Here Quiriacus sleeps in peace." It is known that Quiriacus and his companions suffered martyrdom *ante theatrum*. The spot must certainly call up memories of the early church at Ostia, founded, perhaps, even before that of Rome. One thinks of the gentle Minucius Felix and his Christian friend Octavius, sitting by the silent sea and conversing with Cæcilius, their troubled, pagan companion, of the God who was neither Isis nor Serapis nor Mithras (Min. Fel., *Octavius*, chap. 2, 3). More solemn was the meeting of the sainted Monica and her son. "She and I stood alone," says Augustine (*Confessions* IX, 10), "leaning on a window that looked out over the garden of the house we occupied—there at Ostia by the Tiber, where, far from the crowd, we were resting from the fatigue of a long journey for our voyage. We were talking alone very pleasantly, and, forgetting those things which were behind, and reaching forth unto the things before, we were seeking, in the presence of Truth, which Thou art, what the eternal life of the saints is like, which eye hath not seen, nor ear heard, nor hath it entered the mind of man." And in ecstasy of worship, as they beheld the quiet garden and the star-strewn heavens, Augustine continued: "If the tumult of the flesh were silent in one, silent the fantasies of earth, and of waters and of air, silent the very poles of heaven, and the soul itself . . . . silent all dreams and imaginary revelations, and every tongue and every sign—if they should all be silent and He alone should speak, not by them but by Himself, that we might hear His word not by tongue of men, nor voice of angels . . . . and if one vision should ravish and absorb and enfold the beholder, would not this be 'enter thou into the joy of thy Lord?' And when shall that be? When shall we all rise again but not all be changed?"

Five days later Monica died of the fever, and was buried in Ostia far from Carthage, where she had wished to be. But "nothing is far to God" she said, "and I need not fear lest He should not know, at the end of the world, whence to raise me up."

To the southwest of the theater we come upon a specimen of a Roman house with an excellent mosaic pavement, baths, and a gymnasium. Nearby are the foundations of some structure of the republican period, perhaps of a temple, and a small temple to Venus, as the altar inscription shows. Just behind it is a temple of Mithras, the invincible sun. Opposite the entrance is an altar and along the sides are stone benches, with signs of the zodiac, for the worshippers. There are places for lamps and pockets to receive the blood of victims. The curious mosaic pavement contains 7 circles representing the 7 planets. The strength of the Mithras cult at Ostia is further attested by a large number of inscriptions.

To the southwest, along the river, lie the extensive ruins of the large warehouses for the grain that fed Rome.[18] In one of the chambers are 30 huge amphoræ embedded in the ground (Fig. 8). Nearby is a large private house, erroneously called the Imperial Palace (Fig. 15), containing baths and a splendid hall graced with columns of cipollino. Turning back

[18] For a detailed discussion of the warehouses and docks, cf. Carcopino, *Mélanges d'Arch. et Hist.*, vol. 30, 1910, pp. 397–446; vol. 31, 1911, p. 366.

FIG. 17. MOSAIC OF THE GRAIN-MEASURERS' GUILD

eastward, we proceed along one of the finest streets of the ancient city, lined with shops, which leads directly to the rear of the lofty temple of Vulcan.

This temple (Fig. 12) is a landmark on all the country-side; indeed, it is the only structure of ancient Ostia which remained above ground during the middle ages. Access is gained from the east, after the usual orientation of temples, by a long flight of marble steps. The cella, which is well preserved, is entered by a threshold made of a single block of African marble about 16 ft. long. The size and splendor of the ancient temple were no doubt in keeping with the dignity of Vulcan as the city's patron deity.

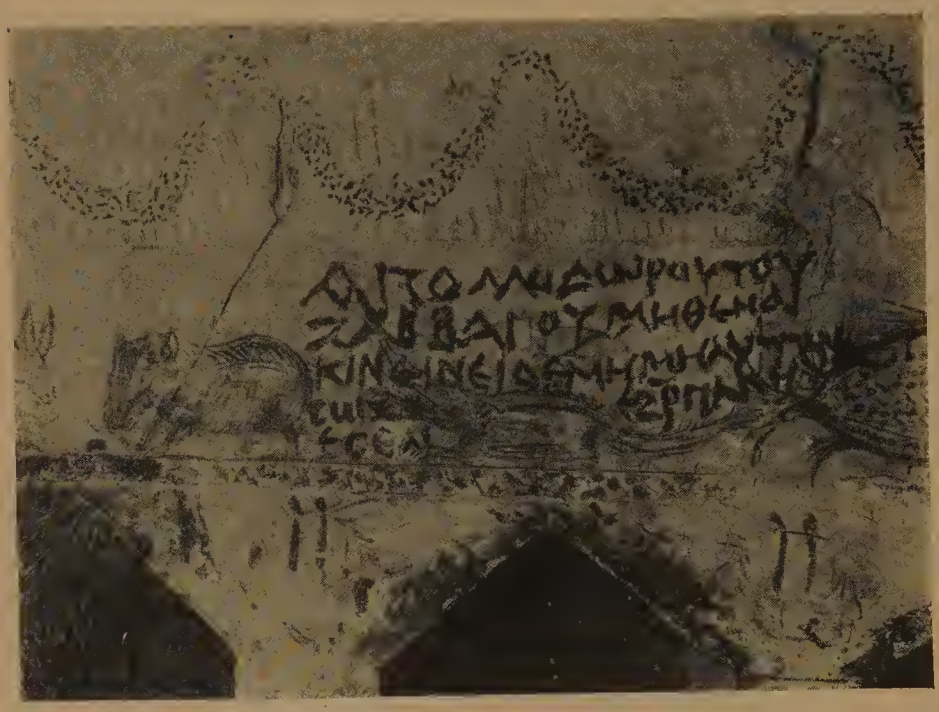
In front of the temple lies a large part of the city still awaiting excavation. To the southwest rise the remains of a XIII century castle, the Torre Boacciana (Fig. 14), so-called from the Bobacciani who were its proprietors.[19] Its site marks the region where the Tiber entered the sea in Roman times. Today, the shore line lies some 3 miles away, and Ostia seems quite abandoned by the sea. And yet a new Ostia may rise as a new seaport for Rome if the project of certain engineers succeeds.

Ostia is not invested in the popular mind with the tragic glamour which belongs to Pompeii, but it is of far greater historical importance. A visit to its ruins insures a truer perspective for the appreciation of ancient Rome. In a certain sense Ostia made Rome, and such scientific excavation as Vaglieri's is adding an interesting chapter to the economic interpretation of history.

J. G. WINTER.

University of Michigan.

[19] cf. Carcopino, *Mélanges d'Arch. et Hist.*, vol. 30, 1910, p. 398, n. 2.



CROCODILE AND HIPPOPOTAMUS FIGURES ON THE NORTH WALL OF TOMB I AT MARISSA

A NEW EGYPTOLOGICAL INTERPRETATION OF JOB[1]

IN EVERY Oriental document the symbols and illustrations must be interpreted to harmonize with its theme and with the current usage of its age. In the book of Job, at the climax of the poem (chapters 40 and 41) we have the two creatures introduced that have so disconcerted expositors. Modern archæology has proved that in the time of Job the crocodile and hippopotamus were in contemporary religious literature constantly associated with the thought of the future world. These animals are mentioned hundreds of times in the religious texts of Egypt, and in no single instance, I think, are they mentioned because of their zoölogical importance, but always because of their demonic character. At least 6 chapters of the Book of the Dead are given up to magic texts which shall protect the deceased from the dreaded crocodile, as he fights his way through the underworld. In many other chapters the crocodile and the hippopotamus, his closest ally, are referred to when incantations are used against the foes of Osiris, and this is equally true in other ancient sacred books of the Egyptians. The male hippopotamus, which in the most ancient time was a "protector of humanity" was in the days of Job a demon. Horus succeeded in winning a resurrection life for Osiris because of the magic knowledge of the *Book of the Killing of the Hippopotamus*. In the pictures he is represented as "the devourer" at the Judgment and sometimes as Set himself. Horus is often represented strik-

[1] This article with a few slight changes and the addition of the illustrations is a section of a more extended article on *A New Interpretation of the Book of Job* by Dr. Cobern, which appeared in *The Methodist Review* for May, 1913.

ing these monsters with a spear, or putting them in chains, or standing in triumph upon them. These creatures are constantly linked together in the texts and vignettes and, with the serpent, continued to be the ordinary representatives of the powers of evil and death far into Christian times—not only in Egypt, but in Algeria, Italy, Phœnicia, Persia, Greece, and Palestine. The classical instance of this is the Metternich stele, where the god Horus, with Bes above his head, stamps on two crocodiles and grasps in his hands other emblems of the powers of darkness. In the mysteries of Isis the goddess wears at her girdle two crocodile heads, and in the Eleusinian mysteries and in those of Mithra the devouring monster of the Judgment has crocodile-hippopotami features. At the recently discovered

THE CROCODILE-GOD SEBEK BEARING THE MUMMY OF THE GOD ON HIS BACK

Above is Osiris in the character of Menu, the "god of the uplifted arm," and Harpokrates as they sat in the disk of the moon, from the third day of the new moon until the fifteenth day. To the left stands Isis. A bas-relief at Philae as reproduced by Budge in *Osiris and the Egyptian Resurrection.*

Tomb of Marissa in Palestine (*cir.* II century B.C.) the crocodile appears with the ibis on his back—the ibis being most intimately connected with the myth of the Osirian resurrection, since that god escaped from Set on its back. The crocodile and hippopotamus were representatives of Set, the god of the desert and the storm, of evil and chaos and death; they were among the most dreaded enemies of order and the resurrection life. If in this final crisis of the Job argument these creatures are to be catalogued zoölogically, then not only does this ancient poem, so praised by Ruskin and Coleridge and Shakespeare, close with the most trivial and superfluous anticlimax known in literature, but, by using these well-known religious

symbols with a meaning unknown to that age, the author must have designedly confused his readers. The comments on Rahab and Leviathan in post-biblical books prove that these were not taken literally, but mythically or symbolically. (Enoch 66. 7–9, 2 Esdras 6. 49–52; LXX 9. 13; 26. 13, "apostate dragon;" 40. 14, 15, 20, etc.). Job himself in other passages undoubtedly shows his familiarity with this common usage and himself follows it (3. 8; 9. 13; 26.12). If *behemoth* and *leviathan* are mere animals in chapters 40 and 41, this is an exception to biblical usage and to the common habit of Job himself. It is also contradicted by the express description given of these creatures. Even Adam Clark, in a far-past generation, wrote of Job's description of the crocodile, "No beast, terrestrial or aquatic, deserves the high character here given" and Nathaniel Schmidt has just said: "The hippopotamus has not a tail stiff as a cedar, does not eat its food in the mountains, and can hardly be thought of as the first of God's creatures. The crocodile does not send forth from his mouth a stream of fire, and no smoke ascends from his nostrils. The great abyss (*tehom*) is not his dwelling-place; he does not cause the ocean to seethe as a caldron and the denizens of heaven cannot be imagined to be afraid of him" (*Messages of Poets*, 205). Compare also, on the dull, sluggish, and harmless nature of the hippopotamus, Ewald *in loco;* Moffat, *Missionary Journeys*, Chapter xi. Modern natives in the Sudan drive them out of their gardens as they do obstreperous camels (compare Budge *Sudan*, i, 41). Cheyne and Gunkel were perhaps the first to definitely defend the mythical reference of these monsters to Tiamat (compare also Duhm's fine insight, *Das Buch Hiob*, p. xii); but the difficulty of reconciling the biblical description with any known Babylonian texts, and the utter failure to see any sense in such reference, if intended, make this theory impossible (see also Budde, *Das Buch Hiob*). It was not Babylon, but Egypt, which in the Job era was determining the literary style of Palestine. Even the Greek script in this era was in some instances Egyptianized. It was not Marduk and Tiamat, but Osiris and Set, whose influence was met with in every stratum during the excavations in northern and southern Palestine. The influence of the Egyptian representations of the crocodile as a symbol of evil extended all over the civilized world and can be seen in Egypt and Palestine to this day. In ancient Alexandria Christ was represented in triumph standing on a crocodile (Nerontsos, *Ancienne Alexandria*, p. 48), and in many old Coptic Cathedrals in Cairo very ancient pictures of the baptism are similarly painted, while above hundreds of Moslem doors the crocodile is hung as a demon charm.

CAMDEN M. COBERN.

Meadville, Pa.

SMALL TEMPLE WITH FLYING FAÇADE DECORATED WITH LATTICE-WORK PANELS AT SABACCHE, YUCATAN

A STUDY OF MAYA ART[1]

THE publication of this magnificent quarto is a fair index of the interest which is still maintained in the antiquities of Central America. Beginning with D. L. Cogolludo's *Historia de Yucathan*, Madrid, 1668, to the present time the press has teemed with descriptions of the remarkable structures in Yucatan, and with theories concerning their significance and the interpretation of the symbols that are carved upon them. The best known of these works are *Incidents of Travel in Yucatan*, by J. L. Stephens; *Travels in Central America*, by E. G. Squire; *Prehistoric America*, by Marcus D. Nadillac, the reports of W. H. Holmes to the Bureau of American Ethnology, and of various explorers to the Peabody Museum.

The area occupied by the Maya Indians included Yucatan, with the adjoining states upon the peninsula, a considerable portion of Honduras,

[1] This article is a summary of the work done by Prof. Herbert J. Spinden for the Peabody Museum of American Archaeology and Ethnology, Harvard University, and is based on his Memoir published by the Museum as Volume IV of their Memoirs, under the title *A Study of Maya Art—Its Subject Matter and Historical Development.*

Guatemala, and the provinces of Chiapas and Tabasco in southern Mexico. The physical features of this region are so peculiar as to be worthy of special attention. "The Maya area, as above defined, contains three principal natural divisions. In each of these the differences in climate, in natural resources, and in topography are marked enough to have had a decided effect upon the material culture of the inhabitants. The first of these divisions comprises the peninsula of Yucatan; the second, the great central valley; the third, the Cordilleran plateau on the south and west. Since the entire region lies south of 22°, it is distinctly tropical except where the altitude counteracts, and is subject to the doldrum rains under the high sun. The duration of this summer rainy season is less in Yucatan than in the two other regions of greater land relief.

"The peninsula of Yucatan is a limestone plain of recent geological formation, with its highest ridges but a few hundred feet above the sea. It has no river valleys because, owing to the porous and soluble nature of the limestone, the drainage is subterranean. There are many caverns and sinkholes. The caverns seldom show signs of former habitation and then only as retreats. The sink-holes are often very large and form natural wells or cenotes.[2] These cenotes determined the location of most ancient and modern towns. Often, however, artificial reservoirs and cisterns, called chultunes, were constructed. In the southeast several large lakes occur, Lake Peten being the most important. The soil of Yucatan is shallow, and although trees grow rapidly and in dense masses they seldom attain great height. The universal building stone is limestone, which also is burned for lime.

"The wide valley plain of the meandering Usumacinta and its maze of tributary streams is a region little known and poorly mapped. It supports at present a small, roving population of wood-cutters, and a few hundred squalid Lacandone Indians, though it must formerly have been the seat of wealth and power, to judge from its ruined cities such as Yaxchilan, Piedras Negras, and Seibal. Like Yucatan, the rocks are young and calcareous. Maler is probably in error when he refers to sandstone at Piedras Negras. In the great alluvial valley stone may be had at but a few points where the hills come close to the river. Consequently many sites show now only the earthen foundation mounds from which the wooden superstructures have long since vanished. Timber is plentiful, the whole region being covered with a dense tropical forest of mahogany and other large trees. The rivers form the highways of travel. The surface of the land is marked by extensive swamps and a number of lakes; hills of moderate elevation vary the topography, and on the southern and western margin the land rises suddenly to the continental plateau.

"This plateau attains an average height above the sea of about 8000 ft., but is deeply dissected by the Chiapas, Usumacinta and Motagua river systems. The crest of the continental range lies so close to the Pacific that no large streams flow into that ocean. The plateau swings to the east round the head of the Usumacinta basin and reaches the shores of

[2] See RECORDS OF THE PAST, Vol. V, pp. 90–92.

Lake Izabel in long narrow spurs, while outlying ridges extend well into British Honduras. The flora of the plateau region is characterized by the oak and the pine, but much of the country is fairly open and well adapted to agriculture. These uplands formed the highway for migrations north and south, and supported a large heterogeneous population, but were apparently never the seat of such high culture as obtained in the lowlands. Copan and Quirigua are both situated on valley floors. Ledges of old blue limestone and of a soft volcanic tuff furnished an abundant supply of excellent building material at the former, while at the latter city a much harder stone of similar volcanic origin was encountered" (pp. 2, 3).

Upon the discovery of America the people occupying this area were found to be in a more advanced stage of civilization than anywhere else in America except perhaps in Peru. Sixty-two ruined cities were reported to have been found in Yucatan alone, of which Uxmal, Akè, Cavah, and Chichen Itza are best known, while Palenque in Chiapas, Coban, and Lorilard (the phantom city) in Guatemala, and Copan in Honduras are in some respects more instructive and impressive.

But the civilization of this region was in many respects limited to a notable degree. Apparently the cultivation of the land was carried on without the aid of domestic animals. They had no knowledge of the smelting of iron, their quarrying and carving having been done by stone implements; and their language was never reduced to written form in characters which represented sounds. But they did make books out of paper made from leaves and vegetable fibre "joined edge to edge and folded like a fan." On these it was endeavored to impart information by picture writing, which it is difficult if not impossible at the present time to interpret.

Of the buildings, the deserted ruins of which are found in the midst of the dense tropical woods, the greater part are very long, flat topped, and one story high, containing many rooms for the most part opening out of doors. These are doubtless private dwellings. But there were numerous buildings of more than one story, the structure of which deserves consideration. "The usual Maya method of erecting buildings of more than one story is both interesting and significant and is readily seen from elevation plans. Owing to the cumbersome construction it was ordinarily not deemed safe to put one room directly over another. . . . . The principal building of Santa Rosa Xlabpak is a most interesting example of symmetry and fine construction." In the accompanying figure "are three typical cross-sections. The masses of solid masonry are shown in black. The first story is on a level with the ground. The rooms open out on all four sides of the buildings and are generally double, one chamber being behind the other. The second story covers a somewhat greater area than the solid core of the first story. The outer walls of the second range of rooms fall in some cases over the interior walls of the first. The third story faces the east and is approached by a broad flight of stairs, at the top of which stands a portal arch. The narrow winding stairway at the back also ascends to the third story. The rooms at this level are all single. Stephen calls this building 'the grandest structure that now rears its ruined head in the forests of Yucatan'" (pp. 102, 103).

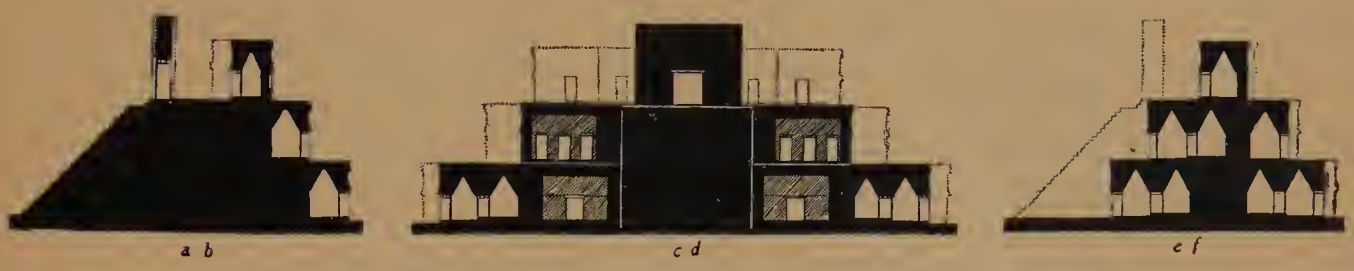
"The ordinary wall construction resembles that of the Romans. It is not true masonry, but a rough concrete faced with cut stone. The universal lime rock of the country was the material that was broken up for rubble, burned for mortar and plaster, and cut with flint chisels for surfacing stones or ornamental sculptured details. Walls made entirely of cut stone are rare.

"Perhaps the nearest approach to true stone masonry occurs at Copan. Here the rectangular blocks of fairly uniform size were laid in a neat and orderly manner. The joints were broken with fair regularity and the corner stones were laid in a simple locking system. Plate 3 shows some of the best preserved walls at Copan in which these details are readily discerned. A heavy layer of mortar was used for floors and a thin coating for walls, but this material seems to have been seldom used to cement together the building stones" (p. 107).

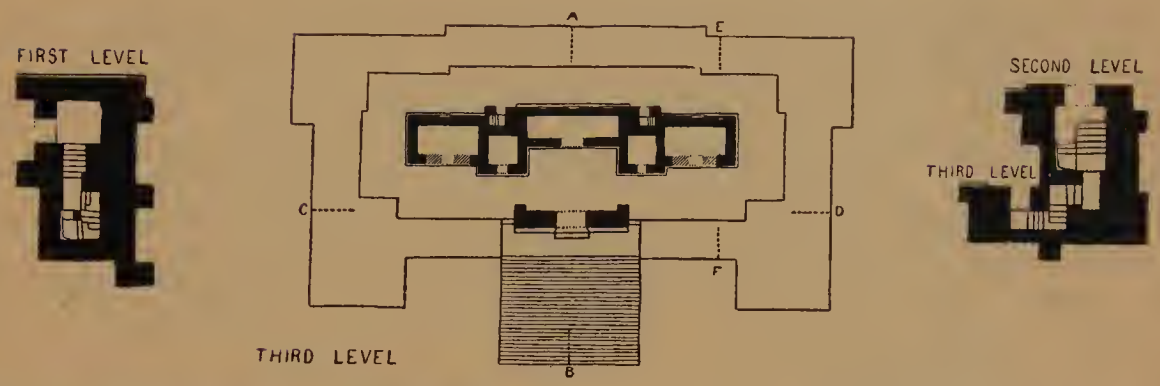
"The Maya vault has usually been described as a corbelled or false arch, built not upon the side-thrust principle of the keystone, but upon the downward thrust of a load upon over-stepping stones. The principle of such a vault was doubtless understood by the Maya builders. Plate 4, Figure 1, reproduces a photograph of a small chamber at Copan that was formerly vaulted. The long neatly cut roof stones may still be clearly made out. Such stones are long enough and broad enough to allow considerable purchase along the contact planes, and the arch of this chamber was probably of the corbelled variety. But although the corbelled arch was known and used to a slight extent, the typical Maya vault was monolithic in character through the liberal use of cement, and was intended to be so by the builders. Plate 4, Figure 2, shows an excellent natural cross section of a typical Maya vault of northern Yucatan. It will be noticed that the stones are fairly well cut on the outer surface, but that they have no purchase upon each other, since only the merest edges come in contact. The stones are held in place by the mortar of the filling and the vault is in effect monolithic. Sometimes the hearting was made exceedingly tight and resistant, but in other cases the mortar was badly mixed with earth and, after the outer coating of plaster had fallen away, the roots of trees were often able to force their way into the chinks, scale off the veneer and even disrupt the walls. But it is exceedingly doubtful if any kind of construction could have resisted better the tropical conditions of heavy rainfall and luxurious vegetation than the mortar construction we have just examined" (pp. 108, 109).

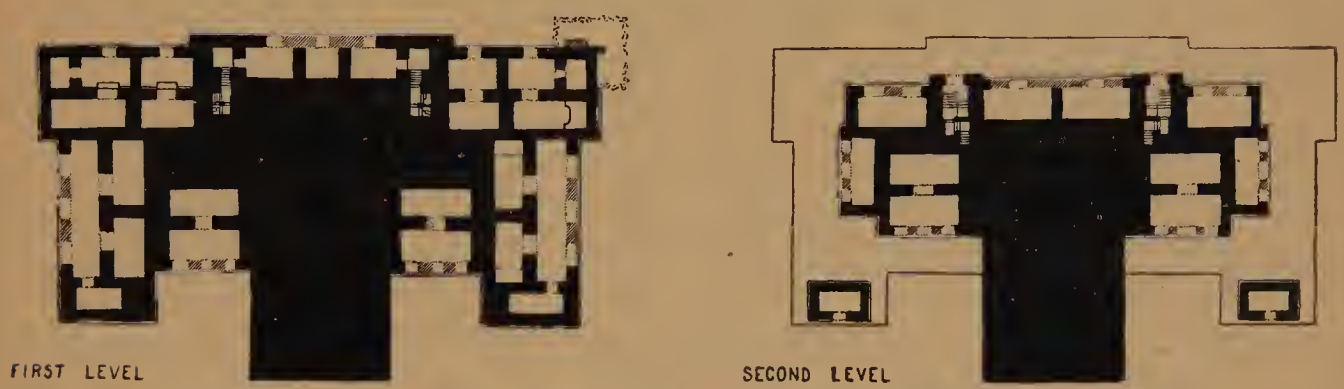
The temples or other public buildings, usually built upon raised platforms are elaborately ornamented in a variety of ways. The most common type of roof structure is known as the roof comb or roof crest. These were specially in evidence at Palenque and Uxmal. Great skill is shown in distributing the pressure of the weight so as to secure economy and sufficiency of support at the same time producing a high degree of artistic refinement.

High artistic skill was shown in the use of columns in connection with door ways; while at Chichen Itza there are hundreds of columns four or more abreast, in long alignment, whose purpose is unknown, but which are



ELEVATION: SANTA ROSA XLABPAK





GROUND-PLANS: SANTA ROSA XLABPAK

thought to have been supports for flat roofs grouped in a way to inclose a market place. Much attention was given to the cornices, which also show great refinement and variety of form.

Realistic decoration was carried to a high degree of perfection. In some cases these were executed in stucco, but ordinarily were carved in limestone, while on the interior colored designs were drawn. The serpent and the human face were specially popular forms of ornament. Masked panels exhibiting the human face in a great variety of forms were extremely common. The figures, however, were often so eliminated that they became conventional, but in other cases the corners of the building were ornamented with projecting sculptures showing great skill in design and workmanship (see p. 129).

The pottery of the Mayas shows far less skill than that displayed in the sculptured monuments. This art was more highly developed in Peru and in Mexico than in the central region. Nevertheless many of the designs portrayed on the pottery of the Mayas are intricate and effective.

It is surprising to find that jadite, one of the hardest of stones, was sawed by the Mayas into slabs and covered with elaborate carvings. The sawing was evidently done by the use of sand and water under a cord drawn back and forth, and the carving effected by drills which used sand and water for a similar purpose.

"The early explorers and historians comment on the beautiful garments worn by the natives of Yucatan. Cogolludo says the cotton cloth of Yucatan made in various colors was traded over all of New Spain. Aguilar likewise comments on the extent of the textile industry. Much of the tribute demanded by the Spaniards was in cloth.

"The everyday dress of the men was a sort of breech cloth that passed around the hips and had end flaps hanging down in front and behind. In the ancient sculptures these apron-like flaps are often embellished. The apron with a grotesque face between two serpent heads conventionalized in the form of frets (Fig. 15) may have been purely a ceremonial elaboration possible in sculptures but not used in real life. It has, however, a remarkably wide distribution among the southern cities of the Maya area" (p. 148).

"The most elaborate textile patterns are found on a sort of blanket which usually envelopes the entire body, although in some cases it seems to have been bound around the waist so that the corners hang down on either side. Figure 207, taken from one of the lintels of Yaxchilan, represents a kneeling supplicant. The entire body of this person is enveloped in a robe having an all-over geometric decoration in squares, a rich border at the bottom and a tasseled fringe along the edge. It is possible that this dress represents the sacklike garment still worn by the Maya women" (p. 149).

CHRONOLOGY

The efforts to obtain chronological sequence from the glyphs, and from the progress in art are for the most part futile. Where the glyphs contain numbers and are found in series that express one or more dates of the Maya calendar there is no means of determining the beginning of the time from which the cycles start. The earliest date which can be fixed with any degree of certainty falls somewhere between 235 B.C. and 160 A.D., but the principles upon which this date even are fixed are very problematical. The great period of development falls between 455 A.D. and 600 A.D. At the close of this period Chichen Itza was destroyed after a period of 200 years of prosperity. Uxmal then rose to pre-eminence which it maintained till about 1200 A.D. During the next 200 years foreign warriors captured and depopulated the Mayan strongholds and left them in the condition in which they were found by the Spaniards.

The connection of Mayan culture with that of surrounding regions presents difficulties which it is impossible fully to overcome.

" . . . . the ruins of Monte Alban, near Oaxaca City, seem to show fairly close affiliation with the Maya, presumably of the earlier period. At this important site there are stelæ and other large blocks of

HOUSE OF THE DOVES, SERRATED ROOF-COMB AT UXMAL

stone carved with rather crude figures of men, monkeys, and composite animals. These stones also carry columns of glyphs, which present a striking superficial resemblance to those of the Maya. The numbers are expressed in the bar and dot system. The pottery heads from Monte Alban likewise resemble Maya work. Many of the jadite amulets found there follow the southern model. Some of these were doubtless obtained in trade.

"In architecture the great use of lofty pyramids arrayed around plazas suggests connections as does the occurrence of small vaulted chambers. The small size of the rooms and the absence of columnar support may fairly be taken as good evidence of early date. The apparent absence of the ball court is also worthy of note. This structure, as we have seen, is absent from the early Maya sites, but appears at a later date in northern Yucatan and upon the highlands of Guatemala. In the Zapotecan region it is found at Quie-ngola according to the authority of Dr. Seler. We may make a supposition—subject, of course, to future proof for or against—that Monte Alban was synchronous to the first great Maya cities or slightly subsequent. It was abandoned and in ruins when the Spaniards entered the country.

"Mitla, on the other hand, apparently lasted down into the Aztec period. It was, perhaps, captured by the warlike Mexicans in 1495. The well-preserved buildings of this city, with their rich mosaic decoration in many geometric patterns, are too well known to require description. The style is peculiar and is found elsewhere only in a few nearby tombs of the cruciform type. The technique of these mosaic decorations is very close to that used on the buildings of northern Yucatan, although the subject

matter is fairly distinct. The rooms are rather wide and in one important instance stone columns were used as a supplementary roof support. The doorways are also wide, this being accomplished by the use of piers. Very little in the way of pottery has been found at Mitla. None of the elaborate Zapotecan funeral urns have been discovered in the tombs although fragments of these vessels may be picked up in the fields. Perhaps the most important criteria of age at Mitla are the remains of fresco paintings. These resemble very closely, both in style and subject matter, the finer Mexican codices. As before remarked, most of these codices were doubtless obtained in southern Mexico. At the advent of the Spaniards nearly all of this region was under the dominion of the Aztecs. The frescos of Santa Rita in British Honduras resemble in many details the frescos of Mitla" (p. 226).

"In 1910 many figurines of a peculiar type appeared on the curio market in Mexico City. They were obtained at Atzcapatzalco, a suburb of the capital, and a place famous in pre-Cortesian annals. At Atzcapatzalco there are remains of several earthen mounds bearing relics of the Aztec and pre-Aztec period. From these mounds have come some of the most beautiful figurines in Mexico, representing richly attired human beings, birds, monkeys, etc. The level plain also contains relic beds which have been exposed at several points by the pits of adobe and gravel gatherers.

"The stratification of the plain is as follows: First comes a layer of alluvial soil some 4 or 5 ft. in thickness, which towards the bottom seems to be impregnated with a whitish volcanic ash. This layer contains many sharp-edged fragments of pottery, including parts of bowls, figurines, whistles, flagellets, pipes, etc. The ware runs the gamut of the different styles of paste and ornamentation found in the neighboring sites of Teotihuacan, Tezcuco and Tenochtitlan. Most of the ware is painted, some is rough and some is highly polished, and many of the vessels have tripod supports.

"Underneath the alluvial layer which contains these objects lies a thick stratum of coarse water-bearing gravel mixed with sand. In some places this gravel layer is 15 or 18 ft. in depth. Throughout this layer are found figurines and potsherds quite different in material and appearance from the relics in the upper bed. The material is a very hard terra cotta containing a large percentage of volcanic ash. The objects are nearly all waterworn and comprise figurines, disk-shaped labrets, bulbous resonator whistles, and fragments of bowls with constricted necks and globular bodies. The figurines are usually 3 or 4 in. in length. They are naïvely realistic and often represent nude women in sitting or standing positions with the hands upon the knees or under the breasts. Other figures represent men. The limbs are well rounded, but taper off so much that the hands and feet are much too small. The faces are characteristically long and the heads of slight depth. The eyes are often tilted, Chinese fashion, and are made by a groove across an applied nodule of clay or by one or more gougings. The headdresses are usually of the fillet type made with little rolls of clay (Fig. 267, a–c)" (pp. 227, 228).

" . . . . . As for identities or similarities in ideas or artefacts between two or more culture areas, there are several possible explanations among which that of actual transmission is often the least likely.

"One group of theories aims to connect Mexico and Central America with Peru and other South American centers. A second group tries to establish a community of interest between the so-called Mound-builders of the Mississippi Valley and the Southeastern State, the ancient and present-day Pueblo Indians of the Southwest and the civilizations of Mex-

MOUND 21, SHOWING TERRACED PYRAMID WITH STAIRWAY AND CHAMBER WITH INTERIOR STEPS COPAN

ico and Central America. . . . . The three principal lines of proof concern:

"1st. Pyramids and other features of material culture.

"2nd. Religious ideas connected with the serpent.

"3rd. Similarities in symbolism and art.

"Pyramids. The building of square-base pyramids had a notable distribution among the ancient centers of high culture both in the Old and in the New World. In the Old World, the most famous examples are the pyramids of Egypt. These pyramids were used primarily as tombs and as such seem to have been a development of the mastaba. They were built during the early dynasties and were later supplanted by other forms. The pyramids of Assyria were however intended to bear temple structures upon their flat summits. They rose in a succession of vertical steps or sloping terraces and were ascended by zigzag inclined planes or ramps and not directly by stairways. Owing to the lack of stone, Assyrian pyramids were built of sun-dried bricks. Except in the matter of stairways and

methods of construction, the pyramids of Assyria were not dissimilar from those of Mexico and Central America. Superficial resemblances might also be noted in the assemblage of rooms in the palace structures and in the marked use of inclosed courts.

"Pyramidal substructures, or at least solid interior cores in the form of the stepped pyramid, were also used by the temple builders of the Far East. Dr. Leemans has described, in an elaborate publication, the great Brahmin temple of Boro Boedoer, in the Island of Java. This temple is distinctly pyramidal in appearance. Somewhat similar temples occur in the highlands of Cambodia, and elsewhere in the Far East.

"Passing to the New World, pyramids are found in three large but detached areas: 1st, western Peru and Ecuador; 2nd, Central America and Mexico; 3rd, the Mississippi Valley and the southeastern portion of the United States.

"The pyramids of South America cover a large area, the limits of which have never been exactly determined. Throughout this area there are many important ruins which show no remains of pyramids, and the pyramid may be called a secondary phase of Peruvian culture. The pyramids are of several types. Some are natural hills which have been leveled and terraced, some are artificial mounds of sun-dried bricks or of cut stone. The pyramid of the famous Temple of the Sun at Pachacamac, near Lima, is a natural hill which has been terraced with 5 low, broad steps faced with well constructed walls. The ruins of the temple occupy the crown of the hill. At Vilcas Huaman, situated about half way between Lima and Cuzco, are remains of a Temple of the Sun, which is carefully oriented although the walls of the neighboring structures show no such alignment. The pyramid arises in three vertical steps admirably constructed of cut stones, and a stairway ascends it on the eastern side. Proceeding northwards, at Huanucoviejo are found ruins of an extensive city showing careful orientation throughout. The principal temple is marked by a well made platform mound having a broad stairway. The so-called Fort of Huinchuz, in the region of Pomabamba, is really a temple structure. The substructure is not a rectangular pyramid, but a terraced and truncated cone rising in six steps. The great pyramid of Moche, near Trujillo, resembles in plan many of the substructures of Central America. Attached to the base of the pyramid are extensive platform mounds. But the method of construction discloses differences. The pyramid is built of sun-dried bricks arranged in tiers that incline inwards. The structure upon the summit of the pyramid and upon the subjoined platforms have all disappeared. At Coyor, or Incatambo, near Cajamarca in northwestern Peru, there is an oval dome-shaped outcropping of granite, the natural place of refuge in a valley subject to floods. This elevation shows 9 concentric artificial terraces. Upon these terraces houses were constructed, and upon the summit a tower-like temple structure was built. There is a lack of references to pyramids in the Calchaqui area and in the southern provinces of the ancient Peruvian empire. No plans or descriptions of pyramids in Ecuador are at hand, but such remains are said to extend well into this county, and may even cross the southern boundary of Colombia.

CROSS-SECTION THROUGH TWO CHAMBERS OF THE TEMPLE AT LABNA

"In other phases of material culture there are but few striking similarities between Peru and Central America. Architecture is very different in the two areas. Metal working, weaving and pottery making, all of which reached a high plane of development in both localities, are sharply distinguishable as regards the technical processes involved and the appearances of the products. The religious and the social organization of Peru is unlike that of the Maya in most respects, and there is evidence that its development was autochthonous and extended over many centuries. The Peruvians had no system of hieroglyphic writing and no carefully elaborated calendar. Certain features of graphic art will be considered separately, but in general this too was peculiar and characteristic of the region" (pp. 232–234).

"The Mound Area of the United States shows several distinct types of mounds and earthworks. Some of the types have a pretty definite limitation to certain parts of the field. Thus nearly all of the effigy mounds lie within the limits of the State of Wisconsin. To be sure, the famous Serpent Mound is situated in Ohio, but this mound falls in a type by itself. The complicated geometric inclosures, perhaps the most remarkable of all mound remains in the entire area, seem limited to the State of Ohio. Burial mounds, of one type or another, occur over the entire area. Pyramidal mounds likewise have a wide distribution and are common in eastern Missouri and Arkansas and in all the Gulf States with the noteworthy exception of Texas" (pp. 234–235).

"A stretch of a thousand miles by the nearest land route separates the southwestern outposts of the Mound Area of the United States and the northeastern point of occurrence of pyramids in Mexico. In all this in-

tervening area there is no record of any culture higher than that of the Athapascan Lipan and the mysterious Jumano. The Indians of Texas and of southern Chihuahua are reported to have been completely nomadic and much given to savage warfare" (p. 235).

"The serpent, usually modified by certain unnatural additions, is seen in art over a great portion of North and South America, as well as in the Old World. In mythology it may be found with similar unnatural features among nearly all the Indian tribes of the United States even where no drawings of it are made. Thus Goddard gives myths of the Indians of northern California concerning a horned snake. A similar monster, possessing antlers and sometimes wings, is also very common in Algonkin and Iroquois legends although rare in art" (p. 237).

The author places little reliance "upon the presence of similar geometric motives to show connection between two regions when the bond is not strongly indicated by other features. The scroll, the fret, the guilloche, the swastika, the stepped pyramid, etc., occur among practically all the high cultures of the world. They form either singly or in combination the universal basis for conventionalization. In many cases they were originally developed through suggestions furnished by the structural limitations of basketry and weaving and were later transferred to other arts.

"Realistic art may show relationships between two cultures principally through peculiarities in representation such as mutual deviations from the normal form of the object represented. Similarities in conventionalized art are much more significant than those of purely realistic art, but even here it is not safe to assume that they indicate transmission of ideas from one region to another. Conventionalized art is made by the amalgamation of geometric and realistic motives and since both of these original factors are liable to be the same in two areas, and since the controlling technique, as in textiles, is apt to impose the same restrictions to growth, it follows that similarities may be extended to the two independent products. Since the idealistic modification of natural forms is based upon more or less constant methods of imaginative reconstruction it must be evident that similarities in this phase of art are not necessarily proof of contact.

"The examples of representative art which have been most frequently taken to show cultural affiliations in the New World are those which present the modified serpent which has already been discussed. Here again we will cast a quick glance over analogous subjects in Old World art. The reason these foreign analogies are given is to vitiate the apparent importance of the similarities in New World art. If the facts submitted prove anything they prove too much. Everyone is willing to admit the basic physical and psychical unity of man but few will admit the cultural unity.

"Many of the ancient temples of India, Burmah, Java, Cambodia, etc., show a high development of the serpent in architectural embellishment. There are great diversity of treatment and a few rather close parallels to Maya art. As a rule the snake body is a simple winding motive completely overlaid by arabesque designs. The idealism does not seem to have led to even partial anthropomorphism although this is clearly

shown in the case of the elephant. The hooded cobra is the snake most frequently represented and the single body often ends in a number of heads in accordance with the East Indian method of multiplying arms, legs, and heads upon the bodies of divinities. The Chinese dragon has a composite origin to which the serpent contributes. The closest parallel to Maya art in the ideal development of the serpent is seen in Egypt. Representations of winged serpents occur in connection with a number of the Egyptian deities such as the Goddess Mersokan and the Goddess Ranne" (pp. 238, 239).

"The elaboration of the serpent in religion and religious art, leading to certain identities in peculiar and unnatural features, has proved to be

SMALL VAULTED CHAMBER SHOWING NICHES, SHELVES AND ROOFING STONES COPAN

one of the most important phenomena of the native culture of the New World—and the Old World too, for that matter. In some of the principal culture areas the development seems to have been entirely independent and indigenous. Elsewhere there may have been an actual connection, often of the most flimsy sort, and entirely unimportant as concerns the larger questions of cultural evolution. For instance, these similar art products may, in some cases be explained by a recrudescence of ideas transmitted by mythology. Word of mouth travels faster and farther than craft of hand.

"Still we may see in these designs the result of a slow exfiltration, with many relays, of ideas originating among the Maya, if you will, but not passing from them directly to the ancient peoples of the Mississippi Valley.

There are no trustworthy evidences of trade relations between the Mexicans and Mound-builders, nor is there any sure indication of fundamental unity of culture at any time in the distant past" (p. 247).

One of the strangest facts about the ancient land of the Mayas has recently been called to attention by Dr. Ellsworth Huntington. It is this: At present the whole district possesses a climate so warm, moist and debilitating that it is almost the worst place on the globe for human habitation. The ruins of the ancient cities, instead of lying amid deserts and under a burning sun, as happens with most of the abandoned capitals of the east, are so overgrown with tangled vegetation and enveloped in fever-stricken swamps that some of them are nearly unapproachable.

The conclusion is that within the past 2000 years a vast change of climate has occurred in that part of America, and that in the days of Mayan civilization the earth's climatic zones were shifted in such a manner that the land occupied by these remarkable people enjoyed very different atmospheric conditions from those that prevail there now. Peten, one of their most important cities, which has not yet been well explored on account of the difficulties of approach, lies in the midst of a region which is at present very sparsely peopled, and where it would be impossible to cultivate the land as it was cultivated in the days of the Mayas.

Only by such a supposition, it is thought, can a rational explanation be found for the fact that the highest native civilization that this continent had developed before the white man came was centered about a location which is now a deadened and almost uninhabitable wilderness.

We know that the Indians of Mexico and Central America developed an autochthonous culture of a high type. We know that in point of time this culture cannot boast a sensational antiquity or even one which will bear comparison with that in classic lands or in the Far East. We know, in a general way, the course of empire; the epochs of brilliancy and decadence. And we know the end of it all, very much as the priest or Balam sang it in one of the scanty fragments of Maya poetry.[3]

Eat, eat, while there is bread.
Drink, drink, while there is water,
A day comes when dust shall darken the air,
When a blight shall wither the land,
When a cloud shall arise,
When a mountain shall be lifted up,
When a strong man shall seize the city,
When ruin shall fall upon all things,
When the tender leaf shall be destroyed,
When eyes shall be closed in death;
When there shall be three signs on a tree,
Father, son and grandson hanging dead on the same tree;
When the battle flag shall be raised,
And the people scattered abroad in the forest.

[3] Brinton, 1890, p. 303.

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TARENYAGON

TARENYAGON—"Holder of the Heavens," according to David Cusick, the Tuscarora—or "Coming from Heaven," as Brinton translates the Onondaga term—is the title applied to the supreme deity of the Iroquois. The *Handbook of American Indians*, giving the Mohawk form, Teharonhiawagon, explains its meaning as, "He is holding the sky in two places."

The story of his celestial life, his identification with Ioskeha, the "Good Mind" that held continual battle with the "Bad Mind," Tawiskaron, and his creation of the world, are all familiar subjects.

An interesting though brief account of the Iroquois is to be found in the "Report of the Committee on Indian Affairs, in Relation to the Petitions of the St. Regis and Onondaga Tribes of Indians, as to their Annuities and Leases," printed as New York Assembly Document, No. 202, April 18, 1870, which gives the following with regard to the Confederation of the Five Nations:

"*Taren-Wago*, a sachem of the Onondaga tribe, was the inspiration and prime mover in making the confederation. He is represented as a man of great skill and of powerful oratorical powers; he was known among the tribes as a great medicine man, and a person who held converse with the Maito-Mainto, or the Great Spirit. At his suggestion the tribes were to meet on a certain day at the foot of Onondaga Lake, for the purpose of entering into the confederation. The great chief absented himself after the order had been given for the meeting of the tribes, and it was supposed that he was holding converse with the Great Spirit. The tribes met on the appointed day, but the great chief, who was to direct and give counsel, was not present. Dismay was depicted upon the countenances of the warriors assembled, and it was surmised that the Great Spirit had taken him away. Time moved on, until late in the day, when a boat was seen gliding swiftly down the lake until it reached the landing, when the shout went up 'Taren Wago has come!' He stepped from the boat to the shore and was caught up and borne to the camp, and thus addressed the council:

"'My friends and brothers, you are members of many tribes; you represent many lodges and many council fires. You come from the east, the rising sun—from the setting sun, and from the great waters north. We meet for common protection; by uniting in a common bond of brotherhood we may triumph; we must make this union upon the rock. Let this be done and we shall drive the enemy from the hunting grounds.

"'You (the Mohawks) who sit under the shadow of the great tree, whose roots sink deep in the earth, and whose branches spread wide to catch the breeze and protect the eagle, shall be the first nation, because you are great in war and have mighty courage.

"'You (the Oneidas) who come from the 'Everlasting Stone,' where the council fires have been lighted for ages, giving token to other tribes of your knowledge and prowess—always giving wise council—you shall be the second nation.

"'You (the Onondagas) who have your habitation at the foot of the 'Great Hills,' and are overshadowed by their craggs, shall be the third nation, because you are gifted in speech, and do move the tribes to act on the warpath and in the battle.

"'You (of the Senecas) whose dwelling is in the dark forest, and whose home is everywhere, shall be the fourth nation, for you are strong in the fight, and great; cunning in the hunt, bringing much meat to the lodges.

"'You (Cayugas) the people who live in the open country and have much wisdom, shall be the fifth nation, because you are skilled in the art of corn-raising, and beans, and making houses, and have great wisdom.

"'Brothers, if we unite in this great bond, we shall have one common interest. You, who are now like the feeble bushes, will grow strong like the tall pines. You, who are the fishermen, will be swift in the boat, and go to many waters. You, who go to war, will be strong in many warriors. You will all be free as the wind, and no tribe can compete with you. The Great Spirit will smile upon us. You must bury in one great council-fire all of your petty strifes, for the common good. Brethren, now is the time to make this bond. If we remain as we are, we shall be scattered and broken in spirit; we shall perish under the war-stone; our name will no longer be remembered or repeated in the dance or war song, and our hunting grounds be taken and pillaged, and our mothers and children be conveyed away. Brothers, these are the words of Taren-Wago. I have talked; I am done; farewell.' Upon which he stepped into his boat and disappeared.

"The Council then adjourned to partake of a great feast that had been prepared for the occasion. The next day the tribes assembled in council. The matrons of the different tribes were invited to be present at the council and assist in the deliberations, and by a vote of the council were clothed with diplomatic power in the deliberations of the confederation in making war or peace."

GRACE ELLIS TAFT.

New York City.

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SUMERIAN LITURGIES FROM THE LIBRARY OF LARSA (BIBLICAL ELLASAR) IN THE YALE BABYLONIAN COLLECTION

BABYLONIAN LITURGIES

UNTIL recently Assyriologists have given little attention to the important branch of Cuneiform literature which is designated by the title of this essay. It was naturally to be inferred that a religion so highly developed, as the Sumero-Babylonian, possessed a considerable corpus of temple liturgies. From the earliest historical period to the last century before our era we find in each city a temple whose cult was devoted to the worship of some local god, whose sphere was theologically defined and rarely transgressed upon that of other divinities. And in the larger temples, chapels were provided for the cults of important gods whose chief temples stood in distant cities. When we consider the vast population of Sumer, Accad, Assyria and adjacent lands which adopted more or less this religion, remembering too that the spiritual psychology of these peoples tended always toward a refined ritualism in their public services, we must expect to discover chants, responsions, refrains and intercessions. Unfortunately this more formal and spiritual part of Babylonian religion attracted no particular attention until very recently. The historians of Babylonia were attracted in the first instance by the magical forms of worship, the sacramental rituals of the wizard

priests who healed the sick, cast out devils and pacified the troubled conscience of sinners. Semitic scholars working in cognate subjects have found Babylonian influence of this kind in Syria, Palestine, Arabia, Egypt and not a little in Greece and Rome. This has added to the earlier impressions of the Assyriologists themselves that the Babylonian religion was chiefly characterized by magic and all the rituals which accompany a cult of this type.

The earlier excavations at Nineveh which resulted in the discovery of the library of Asurbanipal gave us the fundamental material upon which the science of Assyriology has been reared. Babylonian and Assyrian religion has been largely estimated from these sources. And the proportion of liturgical material discovered in this famous collection was insignificant compared with the long series of incantations, penitential prayers, divination series and all that belongs to the magical type of religion. In the original text edition of the British Museum, commonly known as I, II, III, IV, and V Rawlinson, only 3 important tablets belonging to the daily liturgies were published and these remained untranslated until 1909. In the meantime about 1890 the Berlin Museum purchased a collection of several hundred tablets from dealers. These appear to have been partly stolen from the French expedition at Telloh, the ancient Sumerian city Lagash and partly excavated by Arabs without firman at Babylon. The Berlin collection obtained only ordinary Sumerian contracts from the plunder of Telloh, but the irregular excavations of the Arabs appear to have uncovered the remains of a cloister of liturgists and musicians at Babylon. George Reisner published these liturgical texts in 1896 with a penetrating introduction. Doubtlessly Reisner understood in a general way the meaning of these long public services of which he copied 148 large plates and also gave one tablet or book of a duplicate Assyrian daily service. These texts like those in Rawlinson remained unstudied and untranslated for 13 years until an edition of most of them appeared in 1909. It is true that Jastrow had already been attracted by the importance of these texts and had discovered their liturgical character for he translated passages from Reisner's texts in his *History of Babylonian Religion*, where he is still under the impression that they belong to the corpus of private worship. Zimmern assigned certain of these liturgies forming a series sung in the public worship of Ishtar to Miss Hussey for a doctor's dissertation, but in my judgment their real importance was not understood. Last year (1912) I published all the liturgical fragments which could be found in the Asurbanipal library but have since discovered more in an uncatalogued collection.

The excavations at Nippur have shifted the subject to an earlier period and show that the long litanies of Babylonia and Assyria were evolved from Sumerian temple services of a remote age. Radau was the first to publish specimens of this kind of ancient literature which was so successfully cultivated by the schoolmen of Nippur and he attempted to translate them with some measure of success. Some years ago the British Museum purchased several well preserved Sumerian tablets and caused them to be published in their official publication in 1902. These were

undoubtably stolen from the Expedition of the University of Pennsylvania and really belong to the great scholastic library of Nippur. Not until 1909 did these texts receive any adequate treatment but since then they have become the foundation for the study of liturgical origins.

It is becoming increasingly evident that magic and private devotion are not the important factors in the origin of Sumero-Babylonian religion. As we progress in the interpretation of Sumerian texts the religious services written for public worship form the principal material. Incantations do exist in this early period. I found several large magical tablets of this kind in Constantinople and a few in Philadelphia. The collection from Telloh, has also yielded a few. But those thoroughly acquainted with the early Sumerian material agree in the opinion that the Sumerian religion in the historical period to the last days of the vitality of that people was remarkably rich in forms of religious worship which were wholly free from magic. With the Semitic domination began that aggressive movement of the magicians and sacramentarians which permeated the popular cults. But at no period in Sumero-Babylonian history do the purer forms of public worship appear to have lost their popularity. They were chanted at Nineveh by the priests of Sargon and Asurbanipal, at Babylon by the choirs of Nebuchadrezzar and are known to have been studied at Babylon as late as the year 70 B.C.

The Babylonians and Assyrians invariably chanted these choral compositions in the Sumerian language. The prayer books of the late period add an occasional interlinear version in Semitic but there can be no doubt but that the Semitic priests said these services in the ancient tongue. And this is one reason why this body of literature has been neglected and misunderstood. So far as these services had a Semitic version we made some progress in their interpretation, but the early school of Nippur whose work forms our principal source for studying the origin of public worship wrote in classical Sumerian. They probably knew no Semitic themselves. The later Semitic choristers learned Sumerian and wrote in that language. Obviously progress in the interpretation of these texts could not be made until this language was mastered and its decipherment is only now an accomplished fact. Had George Reisner not been side tracked into Egyptology 17 years ago I dare say that Babylonian religion would not have been disproportionately interpreted until now. The struggle to master this apparently insolvable linguisitic problem is one which would be more fittingly told by some later historian. Suffice it to say that Thureau Dangin's masterly work on historical inscriptions was soon followed by the work of others upon the liturgical texts, a work which has placed Babylonian culture in a new light.

Sumerian culture reached its zenith in the III millennium B.C. Before 3000 the theological system had received its final form, being changed by the Semites in later ages in details only. We have material from two important centers, Lagash excavated by the French and Nippur excavated by the University of Pennsylvania. Valuable material is gradually finding its way into our museums from other sites, notably Kes Erech and Larsa. But Nippur appears to have possessed an especially important

school of liturgists. The texts from these archives reflect a scholarly and ancient ritualistic surrounding. Every important deity in the pantheon seems to have had a temple here or at least a chapel in the great city temple of Enlil. In the age of the dynasty of Ur the foreign offerings to these cults became so great that a small town was founded 4 miles from the city as a sort of clearing house for the temples of Nippur. We cannot be in error in assuming that the choristers and liturgists of this school influenced the form of public worship throughout Sumer and consequently of all succeeding ages.

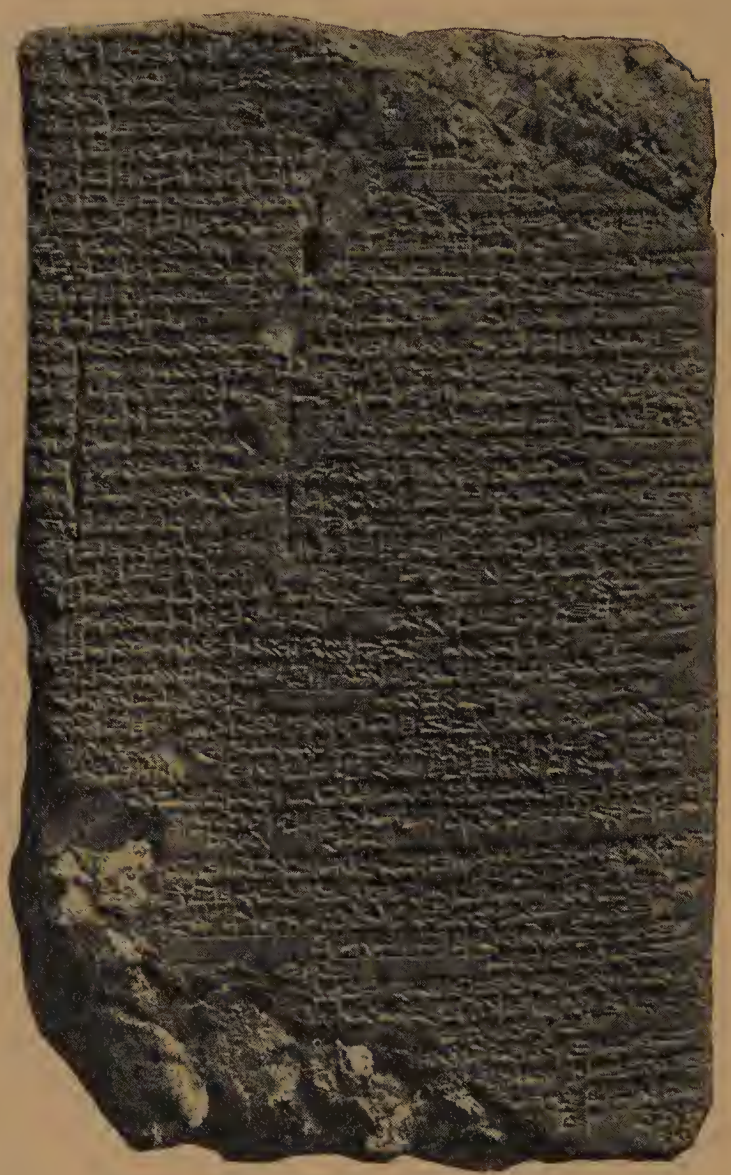
Before speaking of the deeper moral and philosophic aspects of these liturgies I shall outline rapidly the literary forms through which they passed. In Sumer, and I speak now only of this people, liturgical compositions designed to express in public worship the inherent humility and sorrow of mankind antedates all forms of magic and individual forms of worship. And if this people ever employed hymns of joyful expression, lyrics and ballads these have well-nigh disappeared. None have survived later than the XXII century B.C., and only a few are known. A note of profound sorrow; a weariness of sin, pervades the hymns of Nippur and characterize this religion to the end. The earliest compositions known to us are written upon single column tablets and addressed to a single god. The opening line appears to have been accompanied by a musical motif which characterizes the whole hymn. These first lines are generally based upon the dactyl, as *éturgim míginam ságabi áseir*, "Like a sheep fold harassed her heart laments." From the earliest period these chants were accompanied by trained singers and musicians, the flute being the instrument first employed. It is probable that the most primitive compositions were sung in the same musical pitch accompanied by bowing and prostration but as the services lengthened, refrains began to appear and when the refrain changes we may be sure that the musical score changed, thus giving variety to the service. For example a short liturgy of the early period sung in the chapel of Enlil at Nippur begins *ní-tuk níginu úruzu údedug*, "Oh, honored one, repent and behold thy city." For 18 lines the refrain *úruzu údedug* recurs, and later a section marked by the refrain *múnibbi*. This composition is known to have been incorporated into the services of the cults of Ur and Larsa where it was probably sung in the chapels of Enlil built in the temples of the Moon god and the Sun god.

The clerics once having made a beginning in this matter rapidly evolved a very complicated song service. Some of the tablets of Nippur run into 6 columns and contain as many as 200 lines. The Berlin Museum possesses the longest liturgies of the early period, some of them having 20 or more movements and as many as 400 lines. These priests adopted a very simple method for producing their long services by stringing together several old hymns, separating them by lines drawn across the columns of the tablets. In most cases they made excerpts only. Of course only such hymns could be chosen as belonged to the canonical services of a single god. For example an involved liturgy to the Sun god would be built up by arranging several old hymns to this god. In no case would it be permissible to insert a hymn to any other deity. The really productive

age of hymnology is the period in which these melodious and mournful hymns were written, that is before 2300 B.C. From that time onward the temple schools of Sumer and the later schools of Babylonia and Assyria show no originality. A type of scholasticism was soon precipitated and devoted itself to sacred music and liturgical forms. Doubtlessly choral work was highly developed and eunuchs employed in the temple choirs. The musical instruments were combined into the orchestra, whereas in the early period a combination of wind and string instruments was not permissible.

For this reason certain of the hymns of the cloister library of Nippur are written for wind instruments and others for string instruments. The flute and the lyre are typical of these two classes and in the early period wind instruments were the more popular. It is difficult to say when these were combined, probably during the Isin dynasty. Some time during the dark ages between Hammurabi and the revival of learning in the age of Asarhaddon the liturgists of Assyria and Babylonia perfected the long liturgies by adding a recessional, after the service. In this final section only the flute appears to have been used to accompany the singing, whereas the full orchestra appears to have been used during the main service.

It was in the cloisters of such great temples as Esagila of Babylon, Ebarra of Sippar, Eanna of Erech in the last millennium B.C. that the Semites completed that perfect system of canonical liturgy which probably influenced the church services in both Judaism and Christianity. A musical and liturgical school, dedicated to Enmesarra whose symbol was the bull, is known to have conducted the daily services at Babylon for several centuries B.C. and to have edited the corpus of Sumero-Babylonian liturgy. At Nineveh the British excavators found a huge four column tablet containing the first lines of all the liturgies in a certain section of the Asurbanipal library. This catalogue enumerates about 60 of these series, but many others exist. It may well be that in the late period the Babylonians had a different liturgy for every day in the year. Each of these contains ordinarily 600 to 700 lines divided into 20 or more melodies with recessional. If this estimate be anywhere near the truth you will readily understand the immensity of this subject. Unfortunately few of these have survived in their entirety. The schools adopted different methods in their editions. At Babylon it became customary to edit each service on 6 tablets, indicating their consecution by catch lines. We have the entire 6 tablets for one of the Enlil liturgies and also for one of the mother goddess liturgies. Sections of nearly a hundred other services are known. The scholars of the late Sumerian period adopted the rule of editing an entire service on one huge tablet, but these have been almost invariably mutilated in the ruins of the libraries. At Nineveh the scribes employed the three tablet system. A very early method of editing these services and one which must have been convenient for the reader consisted in writing the service upon a square prism about 10 in. high by 4 in. in width. This clay or terra cotta prism was pierced from top to bottom at the centre by a small hole large enough to admit a spindle of considerable strength. I suppose that the priest placed this on an altar or desk and revolved it as



BABYLONIAN HYMN FROM THE LIBRARY OF LARSA (BIBLICAL ELLASAR) IN THE YALE BABYLONIAN COLLECTION

he read the service. But such a device would be of no use to a choir. I dare say both priest and choir recited from memory. Certainly it is not reasonable to suppose that any human being could have read these texts, composed in signs capable of several interpretations and pronunciations, so rapidly as would have been required in a public service. Of course the strain upon the memory must have been great even for one service, not to include the numerous series of which the canon was composed.

The Babylonians had the same reverence for this body of literature as had the Jews of the late period for the canon of the Old Testament, and as Orthodox Christians have for the Bible. Learned comments upon its text occur and the melodies were too sacred for profane utterance. Only the priests and singers who belonged to the temple school possessed the divine prerogative of reciting these services. If the Babylonians had a doctrine of verbal inspiration it was concerning these texts. And if they

had any body of sacred doctrine it was these liturgies. The scribes of Babylonia knew the literary and historical origins of these composite texts, some of which were already 3000 years old in the period of the Jewish Exile. Unlike the Jews of the post-Exilic period they could not surround the origin of their sacred books with the halo of mystery. But the doctrines of their beliefs are all set forth here and they certainly distinguished between this and profane literature.

The Assyriologists have generally underestimated the value of these texts for theological purposes. For example suppose we wish to define the Sumero-Babylonian doctrine concerning the attributes of the god *Ninib*, patron of Lagash, and the god of war. The liturgies of the cult of *Ninib* certainly reveal the orthodox beliefs concerning this god better than any number of references which we might gather from historical and magic texts.

So far as I know the important doctrine concerning the "Word" of the gods exists only in these services. In the recitation of these passages we have surely the confession of a popular belief in the existence of a spirit-logos, messenger of divine power, ruling all created things. Their conception of the divine word was, it is true, only that of a destructive spirit sent forth by an angered god to wreak vengeance upon a sinful people. Thus a daily litany to Enlil begins,

It like the storm is created, its secret none knoweth,
His word like the storm is created, its secret none knoweth.
The word which stills the heavens on high,
The word which causes the earth beneath to shudder.
The word which brings woe to the Earth-Spirits.
His word has no seer, no prophet has it.
His word is an on rushing deluge which none can oppose.
Mother and daughter like a reed-mat it rends asunder.
His word rends the huge *oak*-trees.
The spirit-word reduces all things to its sway
When the word of Enlil wanders forth eye beholds it not.

Here ends the first melody or passage of the service. An interlude is marked by a line across the tablet. The second passage in another measure begins with the weird refrain,

ú-ae-némmani úae-némmani
"Majestic is his word, Majestic is his word."

The sorrows of humanity are ordinarily attributed to this divine agent and particularly characterize the suffering mother litanies which I shall shortly discuss. These passages of the service are written with refrains obviously composed for doleful sounds. For example a liturgy of the cult of the storm-god Adad known in the corpus as the series "*úddamgu-déde-ás*," "Like a storm he calls," opens with the refrain *unanam inganam*. I cannot see, however, that this doctrine of the word had any far reaching effect upon the later history of religion. In some respects it corresponds closely to the prophetic use of the word דָּבָר in Hebrew but the two can scarcely be compared. The Babylonian doctrine is of Sumerian origin

and does not include any element of revelation of the divine will. There are several passages in the Arbela oracles of the Assyrian period which are clearly connected with the *d'bhar Yahweh* style of Hebrew prophecy but these are of Semitic origin, local in scope and do not belong to the canonical literature.

The doctrine of these services which seem to have most appealed to the congregations and believers of all ages is that of the sorrowful mother and her dying son. The liturgies which celebrate the death of the divine child, the wailing of his divine mother, her descent to Hades and return bearing her child in her bosom belong to the so-called cycle of Tammuz litanies and were sung only at the Tammuz festival in midsummer. At least such is the supposition of most scholars and I dare say we may safely concur in this belief. This cult of the dying god has been thoroughly discussed by others, in so far as it existed in Egypt, Phœnicia, Phrygia, Greece and Rome, and has been preliminarily discussed in Babylonia by Zimmern and myself. Since these mid-summer services do not form a part of the ordinary daily liturgies I shall say no more about them, and all the more since a volume on this subject will soon be issued from the Oxford Press. I shall on the other hand draw attention to the fact that this doctrine of vicarious suffering on the part of a mother goddess is based on a cardinal belief of the Sumerians and Babylonians, and is set forth in a large number of liturgies. In fact nearly all of these doleful compositions of cults other than that of the mother goddess bring in passages which represent her bewailing the suffering of humanity, and esteeming their troubles as her own. As you know in the intricate system of Babylonian theology borrowed from the Sumerians the original mother goddess divided into many forms, both married and unmarried. Both types are used in setting forth this doctrine. In the daily liturgies the married goddess *Gula* of Isin or *Bau* of Lagash ordinarily appears as the *mater dolorosa* and in the Tammuz cycle the virgin mother invariably stands in this rôle. Now this indicates an ultimate connection between the two and in my judgment proves the precedence of the Tammuz cycle. The primitive mother goddess is unmarried, and the festival of wailing for the death of her son is, at any rate in Babylonia, the earliest known religious doctrine and ceremony. Daily liturgy is naturally a later development and began to be written after many types of married goddesses had been derived from the primitive virgin goddess. Liturgies sung in the cult of this married goddess although original in Isin and Telloh certainly increased in popular esteem and were incorporated in the prayer books of every city. For this reason, I dare say, every temple provided a chapel for this goddess. For it is probable that a service written for a certain cult could be sung only in the chapel dedicated to that cult. I wish we could be more dogmatic and sure about this matter but our present information is not conclusive. In any case the liturgies entirely devoted to chanting the misery and compassion of Gula and Bau form a considerable part of the corpus of every school of liturgists which we know. More duplicates and fragments of these chants turn up in various collections and in all parts of Mesopotamia than of all other cults combined. This is a sure proof of the power which the doctrines of the *mater dolorosa* had everywhere in Sumer-Akkad and Assyria.

The most well-known service of this kind has been discovered on the tablets of the Berlin Museum which, as I have said, possesses the literary remains of the cloister of Babylon. Duplicates of nearly all of the fourth and fifth tablets are now in the British Museum and come of course from the temple cloister of Nineveh. Early Sumerian duplicates are known for this as well as for many other series, duplicates we should not call them, but rather the short chants of the ancient hymnologists which formed the basis for the later compositions. The Gula liturgy to which I especially call your attention will illustrate the spiritual genius of the Babylonian people. The second tablet of the Babylonian edition begins with a passage of 62 lines introduced by the refrain *úlili íngamme* "She wails in sorrow." Here are a few lines from this section of the service:

For the children she wails in sorrow.
For the wind filled house which lapses into silence
For the city which unto the winds is surrendered.

At all points in these doleful chants the mother goddess may be introduced as the speaker:

With wailing to the lyre my abode is surrendered to strangers.
It is Enlil who turned it over to the winds (*úmune Múllilli Lílláda su-intur*).
My city with sorrow he has filled.
My dwelling place is destroyed, my people are desolate,
I, the queen, roam restless, no peace comes to me.

More obscure is the import of the doctrine which described the Word of various gods taking possession of the sorrowful mother goddess. Of course this idea belongs to that cycle of doctrines which make the word of the chief male deities a destructive agency. If the Word goes forth in the land punishing humanity for its sins, it naturally becomes a foe of the goddess who loves them and whose compassion never fails them. A passage from another series of this cycle has the following lines recited by Gula herself;

With the mighty word I am satiated, even I [cry aloud].
The mighty one who has given me pangs of woe.
Begetting mother am I, within the spirit I abide and none see me.
In the word of Anu I abide and none see me.
In the word of Enlil I abide and none see me.
The begetting mother who knows the sound of lament dwells among the people.

These important lines are unfortunately attended by philological difficulties which render their precise meaning uncertain. We might easily read too little or too much into this mystic relation of the Word to the sorrowful goddess. When the doctrine becomes more familiar to Assyriologists we shall probably read ingenious dissertations on this subject.

Liturgical studies in Babylonian are as you see only well underway. At the present moment our new material belongs to the Sumerian period and much of the Nippur collection is still untouched. We are, therefore, in a fair way of making rapid advances into the methods of the early hymnologists. When a reasonable amount of the classical Sumerian liturgies is published and interpreted we shall probably know the sources of every

one of the complex services of Assyria and Babylonia. It is astonishing to see how persistently the ancient passages were adhered to for 3000 years in these sacred books of public worship. Of the many chants from the services of Nippur which are known to have been borrowed by the Semites not one was changed by the Semitic schoolmen, so far as the words are concerned. And not only did the Sumerians create these chants and fix the forms of the services but they originated every great theological doctrine which the Semites themselves confessed. In the matter of public services Babylonian religion cannot be regarded as Semitic in any sense. I have no doubt but that excavations in Semitic centers such as Sippar, Ashur, Arbela, and Nineveh may yield many more texts of this kind but they, like those we already know, are sure to be composed in the sacred language of Sumer. In a measure this is unfortunate for it is gradually removing Assyriology from the discipline of Semitic studies. Like Egyptologists we shall soon be philologically estranged. Still we shall always have much in common. Only let us recognize that Babylonian religion in all its essential literary forms and doctrines is decidedly un-Semitic and we shall avoid much misunderstanding among ourselves.[1]

STEPHEN LANGDON.

Jesus College,
Oxford, England.

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THE PERRY MEMORIAL

THE ONE hundredth anniversary of Perry's victory over the British fleet in Lake Erie, September 10, 1813, was the occasion of a notable celebration at which there were present the governors of Ohio, Pennsylvania, Michigan, Illinois, Wisconsin, Rhode Island, Kentucky, Minnesota, and Louisiana; General Nelson A. Miles, ex-President Taft, Dr. James A. McDonald, and many others of distinction. All the states here represented with the addition of New York have contributed liberally to the erection of a permanent memorial, which is to consist of a stone tower 300 ft. in height, flanked by appropriate buttresses and buildings for holding relics and providing offices. The tower will be mounted with a light which will be visible far off over both lake and land in every direction. The structure is already well under way and was dedicated with appropriate exercises. Perry's flagship, Niagara, which had lain for nearly a century submerged in the harbor of Erie, Pennsylvania, had been raised, and repaired, and formed one of the most attractive features of the celebration. The remains of both the American and British soldiers and sailors who were killed in the battle and had been buried on Put-in-Bay island on the shore of the bay in which Perry's fleet had made its rendezvous were transferred with appropriate religious ceremonies to their permanent resting place in the crypt under the monument.

[1] At the author's request Professor Albert T. Clay of Yale kindly read the proof of this article.

On every hand this victory is acknowledged to be one of the most significant that has ever occurred. If the British had won the victory and destroyed the American fleet Ohio, Indiana, Michigan, Illinois, Wisconsin, and all the Northwest would have been retained by them and the United States would have been limited to the eastern portion of the continent.

At the time the battle on Lake Erie was raging General William Henry Harrison was encamped with his army at Fort Seneca on the Sandusky River, 9 mi. south of the present city of Fremont, and 30 mi. from the lake shore, awaiting the results of the naval battle. It was to him that Perry's celebrated report was made, "We have met the enemy and they are ours," whereupon Harrison moved his army down to the lake shore and they were transported by Perry's fleet to the Canadian shore and soon after fought the battle of the Thames which resulted in the total rout of the British army, the death of the famous chief Techumseh, and the discouragement of the Indian allies that were coöperating with the British.

In connection with this celebration there has been widespread interest all over northwestern Ohio, incited largely by the Daughters of the American Revolution, the Colonial Dames of America, and the Daughters of 1812, to mark the sites of the military roads that were cut through the dense forests both in the year 1812 by the army of General Hull that was surrendered that year to the British in Detroit, and by that of General Harrison who retrieved the fortunes of the American army in 1813. Monuments have been erected at a great many places where these roads are known to have crossed present lines of travel, and others have been erected to mark the burial places of the many unknown soldiers who died by the way upon these expeditions.

Appropriately the theme dwelt upon most in the Put-in-Bay celebration was that it marked one hundred years of peace with England.

PEACE AGREEMENT

The naval force to be maintained upon the American Lakes by his Majesty and the government of the United States shall henceforth be confined to the following vessels on each side, that is:

On Lake Ontario to one vessel, not exceeding 100 tons burden and armed with one 18-lb. cannon;

On the upper lakes to two vessels, not exceeding like burden, each armed with like force;

All other armed vessels on those lakes shall be forthwith dismantled, and no other vessels of war shall be there built or armed.

The naval force so to be limited shall be restricted to such service as will in no respect interfere with the proper duties of the armed vessels of the other party.

The signatories were John Quincy Adams, James Monroe, Lewis Cass, Richard Rush, and Lords Castlereagh and Bagot.

EDITORIAL NOTES

AMERICAN ANTHROPOLOGICAL ASSOCIATION AND AMERICAN FOLK-LORE SOCIETY.—The joint annual meeting of these Societies will be held in West Assembly Hall, American Museum of Natural History, New York City, December 29–31, 1913.

Titles of papers and abstracts of the same should be sent not later than December 1 to the undersigned, who is responsible for the joint program. The program will be mailed to members about the 10th of December. George Grant MacCurdy, Secretary Am. Anthr. Assoc., Yale University Museum, New Haven, Conn.

THE BABYLONIAN SISIKTU.—Dr. Albery T. Clay makes the interesting observation that the "*sisiktu* mentioned in the inscriptions of Babylonia and Assyria is in all probability to be identified with the four cords which are seen in Assyrian reliefs and Babylonian seal-cylinders hanging from beneath the tunic worn by deities and men, or suspended from the girdle. The marks made by the *sisiktu* upon clay tablets, which served as a substitute for the impression of the seal-cylinder, indicates that they were made by a knot of such a cord pressed into the clay. The significance of the *sisiktu* at present is not understood, but it is to be noted that it was regarded as a calamity when a man was deprived from wearing it.

"Although there are philological difficulties in identifying the Old Testament *sisith*, which served as a reminder of the Jewish obligations to the law, the Bayblonian *sisiktu*, written *ziziktu* in the early period, is doubtless to be regarded as identical."

ANCIENT ASSYRIAN MEDICINE.—R. Campbell-Thompson, M.A., says that there there are about 500 tablets or fragments of tablets unpublished in the British Museum. They relate to diseases of the head, hair, eyes, nose, ears, mouth, teeth, stomach, and other organs; the treatment of pregnancy and difficult travail; poultices, potions, and enemas; and the assuaging of snake bites or scorpion stings. The drugs in use can be numbered by the score. Several have already long been satisfactorily identified. I believe that I have been able to identify two narcotics, one, the 'Heart-plant,' as one of the Hyoscyami, some years previously; the other as the mandrake, to be used in allaying headache by continuous applications to the head and neck.

"In the tablets relating to eye diseases, the *lish-a-bar* is a drug of fairly common occurrence, and from its connection with the mineral *a-bar* (probably antimony) I see in it the well-known stibium used by Orientals. Another mineral in use for eye troubles is copper dust, in which we may see the forerunner of the more modern sulphate of copper."

A ROMAN COIN FROM ONE OF THE MOUNDS IN ILLINOIS.—Early in the year a Roman coin $\frac{3}{4}$ in. in diameter, was reported as discovered in one of the mounds in Illinois and was submitted to Alfred Emerson, Ph.D.

of the Art Institute of Chicago. As he has been misquoted in the press we take pleasure in printing a portion of his letter to us regarding this coin.

EDITOR RECORDS OF THE PAST, Washington.

Dear Sir: The indications are that the coin is of the rare mintage of Domitius Domitianus, emperor in Egypt. As to its discovery in an Illinois mound the responsibility for that lies with the discoverer and owner. For my part I consider the find to show that the mound was either posterior to white ranging of this continent, or that the coin reached the mound after its erection. Having expressed myself pretty clearly in this sense to reporters I was not surprised to be quoted as an illustrious person holding the opposite view. . . . It will be a pleasure to clear myself of the foolishness imputed to me by these irresponsibles by a short notice in RECORDS OF THE PAST.

[Signed] A. EMERSON.

COMPLETION OF THE PEABODY MUSEUM.—On May 28, 1913, the sod was turned for the foundations of the last section of the Peabody Museum, Cambridge, Mass., that will join it to the University Museum. The address was by Prof. F. W. Putnam, who assisted in breaking ground for the first section 54 years ago. Owing to his absence through illness, this paper was read, in the Peabody Museum, by Dr. Charles Peabody. A considerable company listened to the reading, and proceeded afterwards to the southwest corner of the open space between the Peabody section and the Geological section of the University Museum. Here President Lowell with a spade cut out a sod, which was lifted and placed on a wheelbarrow by Mrs. H. L. Higginson, a daughter of Prof. Louis Agassiz. After that, Messrs. George and Max Agassiz, with Dr. Charles Peabody, Mr. C. C. Willoughby, and other officers of the different sections of the Museum lifted sods and placed them in the wheelbarrow, Professor Putnam being represented by his son Eben and his daughter Alice, thus following out the plans made by Prof. Louis Agassiz for the cutting of the first sod of the Museum building. A small column of earth adjoining the spot where the sod was cut was left standing in the excavation so that Professor Putnam might actually take part in the removal of the last sod. On June 21 Professor Putnam, Mrs. Putnam and Miss Putnam, Mr. Samuel Henshaw, Director of the Museum of Comparative Zoölogy, Dr. C. Peabody and his son Alfred, with Mr. Willoughby and Mr. Guernsey, officers of the Peabody Museum, took up this sod and removed the column of earth from the excavation.

ENVIRONMENT AND RELIGIOUS IDEAS IN NORTHERN ASIA.—Miss M. A. Czaplicka in discussing the influence of environment upon the religious ideas and practices of the aborigines of Northern Asia, says: "In Northern Asia or Siberia there are two main types of geographical environment, with corresponding variations in the forms of *shamanism* observed there. These types may be termed northern and southern.

"1. Along the whole northern section, a boundless lowland zone, consisting of tundra, where fishing and hunting can be carried on in summer

only, and reindeer-breeding is scarcely possible, owing to deficient vegetation, the people live for nine months of the year in underground or half-underground houses.

"2. Farther south the land rises to the Siberian highlands. Here the inhabitants of the steppes lead an open-air, nomadic, pastoral or hunting life. The climate is 'Continental.'

"I. In the north we see the influence of darkness, cold and scarcity of food on the religious ideas of the people. There is a religious dualism, but the worship of 'black' spirits prevails. Family shamanism is more important than professional shamanism, since the environment does not encourage social aggregation. The animals on which the people's livelihood depends are the object of cult, inanimate objects of worship being generally symbols of them. There is no clear idea of an anthropomorphic god; the distinction between men and animals disappears in myths and in representations of superior beings. Ceremonials are almost exclusively seasonal, and are connected with the food supply and with the expulsion of the bad spirits.

"II. In the south we find a religious dualism in which the 'white' element prevails. Life amid open country and mountains has led to worship of the sky and heavenly bodies. Animals are respected but not worshipped. In the mythology it is the man that plays an heroic part. Comparative abundance of food permits certain spontaneous ceremonial expressions of religious feeling not necessarily connected with the food supply. The shaman is a professional. Bloody sacrifices predominate in the south. The *ongon* is not merely a fetish, but the image of a god." *Man.* London.